# DEVELOPMENT OF AN EDUCATIONAL INTERVENTION TO REDUCE THE RISK OF HIV/AIDS FOR INCARCERATED ADOLESCENTS DETAINED IN A COUNTY JAIL

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

## DEDICATION

This dissertation is dedicated to my mother, Julia Sanders (December 20, 1916 – March 07, 1998). Her courage, strength, love and passion for living life to the fullest have been and continue to be an inspiration to me.

#### **ACKNOWLEDGEMENTS**

I would like to thank all those who were instrumental in helping me achieve a lifelong goal—my doctor of philosophy degree. My committee chair, Barbara A. Rienzo, provided unyielding support, encouragement, and professional guidance. My committee members, William Chen, Paul Duncan, and David Miller, graciously offered their time, professional expertise and professional guidance.

All my sisters and brothers, especially my sisters Mary S. Robbins and Sallie S. Shoemo and their families; my sister-in-law, Mary A. Sanders; and my niece, Christine Arnold, provided me unyielding support and love. My dearest friends, Lorraine Austin-McLeod, Carolyn Taylor, Edna Williams, Robert Joseph, Cynthia Ward, Evelyn Joseph, Margaret Gooden, Drucilla Washington and Alvin Lyons; and the New Macedonia Baptist Church family provided me ongoing encouragement and support. Melissa Silhan, Vice President of Lakeview Center, Inc., provided me a variety of professional opportunities. J. J. Crater and S. Kathy Zoss, Department of Forensics, eagerly offered me an opportunity to conduct my research in the Escambia Florida, jail.

Foremost, I would like to thank my brother and hero, David L. Sanders, for a lifetime of caring and support of all my educational endeavors.

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Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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August 1998

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Research reveals that youth who are detained or incarcerated in correctional facilities constitute a subgroup of adolescents at high risk for HIV infection due to their engagement in considerably more HIV-related sexual and drug use behaviors than the general adolescent population. Although AIDS cases among adolescents appear to be low (less than 1% of total reported AIDS cases), the majority of AIDS cases (64%) are diagnosed in persons aged 20-39, indicating that initial infection frequently occurred during the teenage years and early twenties due to the 9-15 year latency period.

Few studies have focused on HIV prevention among incarcerated adolescents and none to date have addressed juveniles who are incarcerated in adult facilities. This study identified specific HIV/AIDS education needs of juveniles incarcerated in the Escambia County, Florida, jail and developed an

appropriate educational intervention for these youth based on the AIDS Risk Reduction Model (ARRM) (Catania, Kegeles, & Coates). Survey data results revealed that, socio-demographically, these juveniles are predominantly male. they are between the ages of 13 and 17, the majority are of ethnic/racial minority status (70.5% African-American), and more than a fourth have been incarcerated over three months. Regarding HIV high-risk behaviors, almost all of these juveniles are sexually experienced (98%), more than half have had over 10 lifetime partners, the majority do not use condoms consistently, and a vast majority (82.3%) had used marijuana. Research studies have found that noninjecting drug use, including alcohol, is associated with high-risk sexual behaviors. Non-injecting drug use may increase adolescents' sexual risk for HIV infection indirectly by lowering inhibitions and impairing judgement. In reference to HIV/AIDS knowledge and attitudes, overall, these juveniles possessed moderate to high levels of HIV/AIDS knowledge regarding. prevention, mode of transmission, and high-risk behaviors. However, they reported attitudes that potentially may increase their risk for becoming exposed to and infected with HIV. For example, the majority of these youth did not perceive themselves to be a high risk for contracting HIV and a large minority believed that there is a cure for AIDS. These findings were used to develop a theoretically sound prevention education program for these youths.

#### CHAPTER 1 INTRODUCTION

Acquired Immunodeficiency Syndrome (AIDS) continues to present itself as one of the most devastating epidemics of the nation and the world. HIV is beset by medical, legal, psychological, and social complexities. Although now treatable, AIDS remains a fatal disease. Infection with human immunodeficiency virus (HIV), the primary causal factor of AIDS, has the potential to severely disrupt the lives of individuals, families, and communities. It is often characterized by shame, guilt, fear, loss of dignity, financial ruin, and abandonment. Nelkin, Willis, and Paris (1990) declare, "AIDS in no `ordinary' epidemic. More than a passing tragedy, it will have long-term, broad-ranging effects on personal relationships, social institutions, and cultural configurations' (p. 1).

Through December 1996, a total of 1,599,021 cases of AIDS had been reported worldwide (PAHO/WHO, 1997). The World Health Organization (WHO) estimated that 29.4 million people (worldwide) have been infected with HIV since the start of the pandemic in the late 1970s to early 1980s (PAHO/WHO, 1997). Well over 6,000 people become infected each day and an estimated average of 40 million people worldwide will become infected by the year 2000 (WHO, 1995).

In the United States, as of December 31, 1996 over 581,000 cases of AIDS have been reported to the Centers for Disease Control and Prevention (CDC, 1996). Adults/adolescents have a 62.3 case-fatality rate, while pediatrics (children < 13 years old) have a 57.8 case-fatality rate (CDC, 1996). According to the CDC, as of January 31, 1995 AIDS is the leading cause of death in men and women aged 25-44 and the fifth leading cause of childhood deaths. To date, no AIDS cure is available and no vaccine for preventing infection with HIV exists. Currently, education appears to be the most viable weapon against the spread of HIV/AIDS.

# Statement of the Research Problem

The total number of infected teenagers is unknown. Research studies reveal varying infection rates. Stein (1993) estimated that teenagers comprise approximately 20% of the HIV-infected population. In the United States, the majority of teenage AIDS cases (13-19 year olds) occur through transfusion of blood products or heterosexual transmission (HIV/AIDS surveillance report, 1995). Although AIDS cases among adolescents appear to be low (less than 1% of total reported AIDS cases), the majority of AIDS cases (64%) are diagnosed in persons aged 20-39, indicating that initial infection occurred during the teenage years and early twenties due to the 9-15 year latency period (HIV/AIDS surveillance report, 1995).

Youths who are detained or incarcerated in correctional facilities represent a medically underserved population that is at high risk for a host of preexisting medical and emotional disorders (Council on Scientific Affairs, 1990).

These youths constitute a subgroup of adolescents at high risk for HIV infection due to their engagement in considerably more HIV-related sexual and drug use behaviors than the general adolescent population (DiClemente, Lanier, Horan, and Lodico, 1991).

This study identified specific HIV/AIDS education needs of juveniles incarcerated in the Escambia County, Florida, jail and developed an appropriate educational intervention for these youth utilizing survey data results. The educational intervention is based on the AIDS Risk Reduction Model (ARRM) (Catania, Kegeles, & Coates, 1990).

#### Purpose of the Study

The purpose of this study was to identify specific HIV/AIDS education needs of juveniles incarcerated in the Escambia County, Florida jail and develop an appropriate educational intervention for these youth, to enable educators to more effectively educate incarcerated juveniles about high-risk behaviors including substance abuse and unsafe sexual practices.

## Significance of the Study

Several research studies have focused on the issue of AIDS education within the correctional setting. However, few to date have targeted the jail system and even fewer have considered incarcerated youth. Jails are potentially effective vehicles for reaching drug users and individuals engaged in unsafe sex practices.

The criminal justice population, because illicit drug use and unsafe sexual practices are prevalent in their backgrounds, is at particularly high risk of HIV

infection (Stevens, 1993). AIDS is rapidly becoming the leading cause of death among correctional inmates (Gellert, Maxwell, Higgins, Pendergast, & Wilker, 1993). According to Pagliaro and Pagliaro (1992), "Inmates generally engage in a greater number of these high-risk behaviors. (e.g. anal intercourse, needle sharing) more frequently than members of the general population" (p. 205). Through October 1989, a total of 5,411 cases of AIDS had been reported among inmates in state/federal correctional systems and 30 large city/county iail systems (Hammett & Moini, 1990a). Incarcerated youth are among those at risk for HIV infection due to their participation in high-risk behaviors such as illicit drug use, sexual activity with multiple partners, and/or failure to use condoms (Harper, 1992). As of 1989, approximately 94,000 10-17 year olds were detained in juvenile facilities and during 1990, an estimated 6,000 juveniles were incarcerated in local jails or in State or Federal prisons. Polonsky, Kerr, Harris, Gaiter, Fichtner, and Kennedy (1994) report that "Education and prevention counseling are at present the least controversial ways to control the spread of HIV infection" (p. 621). Education is a potentially viable prevention strategy crucial for the promotion of risk-reduction behaviors among incarcerated adolescents.

#### Delimitations

 Juveniles incarcerated in the juvenile section of the Escambia County (Florida) jail and in DISC Village (Tallahassee, Florida) were invited to participate in the study.

- Data were collected from juveniles incarcerated during the months of March-October, 1996.
- The UCF AIDS/HIV Questionnaire (Appendix A) and the UCF AIDS/HIV
   Interview Questions (Appendix B) were used to assess knowledge, attitudes, behaviors, and socio-demographics of juveniles detained in the Escambia County, Florida Jail and DISC Village, Tallahassee, Florida.
- The intervention, based on the AIDS Risk Reduction Model was developed using information obtained from the UCF AIDS/HIV Questionnaire and the UCF AIDS/HIV Interview Questions.
- Health risk behaviors regarding substance use and sexual practices were determined by subject self-report.

#### Limitations

- Participants incarcerated in the juvenile section of the Escambia County, Florida jail and participants incarcerated in the DISC Village detention facility (Tallahassee, Florida) may not represent the population of all subjects in such settings.
- Participants obtained were incarcerated youth available during March through October of 1996. Participation was strictly voluntary.
- Findings from the study were limited by the ability of the UCF AIDS/HIV
   Questionnaire and the UCF Interview Questions to accurately assess
   participants' knowledge, attitudes, behaviors, and socio-demographics.
- 4. Reliance on self-reported history of sexual and drug use behaviors.

#### Assumptions

- Participants obtained for the study are representative of Escambia County. Florida iail.
- Juveniles incarcerated during the months of the study are not dissimilar to juveniles detained in other months.
- Data obtained by subject self-report were not dissimilar to that of inmates detained in other months
- Instruments were adequate for the purpose of the study.

#### Research Objectives

This study has several objectives. For all these objectives, responses from the juveniles in the adult correctional facility will be compared with those of youth detained in a juvenile detention facility to determine if their education needs are comparable. The objectives of this study are to determine the:

- Demographic characteristics that describe juveniles incarcerated in an adult facility who are at high risk for HIV infection;
- High-risk behaviors related to HIV/AIDS reported by juveniles detained in these correctional facilities;
- Level of HIV/AIDS knowledge of juveniles detained in these correctional facilities;
- Attitudes related to HIV/AIDS of juveniles detained in these facilities;
- Components of a potentially effective HIV/AIDS prevention program
  based on the AIDS Risk Reduction Model for juveniles detained in an
  adult correctional facility. The UCF AIDS/HIV Questionnaire (Appendix A)

and the UCF Risk Assessment Interview (Appendix B) were used to plan the educational Intervention.

## Definitions of Terms

Acquired Immunodeficiency Syndrome (AIDS) - the final, life-threatening stage of infection with human immunodeficiency virus (HIV) (The World Book Encyclopedia, 1995, p. 163).

<u>Adolescence</u> - transitional phase of growth and development between childhood and adulthood. "Adolescence" is a convenient label for the period in the life span between 12 and 20 and is roughly equivalent to the term "teen" (The New Encyclopedia Britannica, 199, p. 104.

Centers for Disease Control and Prevention (CDC) - the federal agency operating under the U. S. Department of Health and Human Services, Public Health Services, that is responsible for protecting the public health of the nation by instituting measures for the prevention and control of diseases, epidemics, and public health emergencies. Founded in 1946 (Huber, 1993, p. 32).

High-risk Adolescents - adolescents at high risk for HIV/AIDS include those who engage in unprotected sex, have multiple sexual partners, share needles and other injected drug equipment, or have sex with a "high-risk" person (Bowler, Sheon, D'Angelo, & Vermund, p. 345).

Human Immunodeficiency Virus (HIV) - the virus that causes Acquired
Immunodeficiency Syndrome (AIDS). It is a retrovirus that infects the T4
Iymphocyte cells, monocyte-macrophage cells, certain cell populations in the
brain and spinal cord, and colorectal epithelial cells. HIV-infected cells weaken

the immune system. Individuals infected with the human immunodeficiency virus do not necessarily have AIDS. Previously called lymphadenopathy virus, human T-cell leukemia virus III, and human T-cell lymphotrophic virus III (Huber, 1993, p. 76).

<u>Jails</u> - facilities designed for detaining people awaiting trial and for people serving sentences of less than one year (Polonsky, Kerr, Gaiter, Fichtner, & Kennedy, 1994, p. 615).

<u>Juvenile</u> – a young person who has not yet attained the age at which he or she should be treated as an adult for purposes of criminal law. In some states, this age is seventeen. Under the federal Juvenile Delinquency Act, a "juvenile" is a person who has not attained his eighteenth birthday (18 U.S.C.A. section 5031) (Black's Law Dictionary, 1993, p. 867).

<u>Juvenile Facility</u> - may include public or private detention centers, training schools, shelters, halfway houses, and the like (Polonsky et al., 1994, p. 625). <u>Substance Abuse</u> - the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Criteria for Substance Abuse:

- A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one or more of the following, occurring within a 12-month period:
  - (1) recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substancerelated absences, suspensions, or expulsions from school; neglect of children or household)
  - (2) recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)

- recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)
- (4) continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)
- The symptoms have never met the criteria for Substance Dependence for this class of substance (APA DSM IV, 1994, pp. 182-183.)

<u>Substance Dependence</u> - the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Criteria for Substance Dependence: A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

- (1) tolerance, as defined by either of the following:
  - a need for markedly increased amounts of the substance to achieve intoxication or desired effect
  - (b) markedly diminished effect with continued use of the same amount of the substance
- (2) withdrawal, as manifested by either of the following:
  - the characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for withdrawal from the specific substances)
  - the same (or closely related) substance is taken to relieve or avoid withdrawal symptoms
- (3) the substance is often taken in larger amounts or over a longer period than was intended
- there is a persistent desire or unsuccessful efforts to cut down or control substance use
- (5) a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects
- (6) important social, occupational, or recreational activities are given up or reduced because of substance use
- (7) the substance use is continued despite knowledge of having persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer

was made worse by alcohol consumption) (APA DSM IV, 1995, p. 181)

World Health Organization (WHO) - founded in 1948, this international organization is the health agency of the United Nations. Its goal is to achieve the optimum level of health care for all people. Objectives of the WHO include directing and coordinating international health work, ensuring technical cooperation, promoting research, preventing and controlling disease, and generating and disseminating information. The Organization emphasizes and supports the health needs of developing countries; establishes standards for biological, food, and pharmaceutical needs; and determines environmental health criteria (Huber, 1993, p. 162).

# CHAPTER 2 REVIEW OF THE LITERATURE Introduction

A healthy, productive generation of adolescents in the 1990s will ensure that America has the healthy generation of adults needed to support the growing elderly population in the 21st century. The AIDS epidemic threatens the viability, perhaps the very existence, of this next generation. The social and economical well-being of this first "AIDS generation" may well predict the future well-being of this nation as a whole in the next century. (Hein, 1992, p. 3)

Medical interventions relating to HIV disease will have a significant economic impact upon the health care industry. In 1993, \$940 billion were spent on health care in the United States--12.1% of the gross national product.

According to Healthy People 2000, 75% of health care dollars are spent on chronic illnesses and only 1% on preventing these same illnesses. Given the long latency period and the development of effective HIV treatments, AIDS, a chronic disease has the potential to consume a large portion of U. S. health care dollars. Jonsen and Stryker (1993) report that in the U.S., AIDS is responsible over 200,000 people receiving services from the health care system over the last 10 years, and an estimated one million are expected to receive services in this decade, many of whom are uninsured or underinsured.

The cost of AIDS is defined in terms of non-monetary and monetary costs. Non-monetary costs, according to Bloom and Carliner (1988), "include the value that AIDS patients, their families and friends, and other members of society place on the suffering and death of AIDS patients and on the need to behave differently to avoid contracting AIDS" (p. 604). Monetary costs include both direct and indirect costs. Direct costs are personal medical care costs such as diagnosis and treatment, and non-medical costs include research and prevention. Indirect costs represent the production lost to society due to the disease's morbidity and mortality (Farnham, 1994).

The literature focusing on Human Immunodeficiency Virus (HIV) disease among adolescents is presented in this chapter. This chapter will review literature on (1) HIV and adolescents, (2) HIV and high-risk adolescents, and (3) HIV prevention programs and adolescents.

#### HIV and Adolescents

In general, the nature of adolescence places teenagers at risk for becoming exposed to and infected with HIV. Adolescence is characterized by the desire to seek independence from parents and other authority figures, conform to peers, take risks, and to experiment. According to Rotherman-Borus and Kooperman (1991), "The three behaviors that place persons at highest risk for HIV are typically initiated during this developmental period: unprotected sexual intercourse, IV drug use and the use of drugs and alcohol that disinhibit sexual behavior or lead to IV drug use" (p. 67).

#### Behaviors

While some research studies reveal that persons who are more knowledgeable about AIDS engage in low risk behaviors, others show that persons who are more knowledgeable about AIDS engage in unsafe sexual practices (Morrison, Baker, & Gillmore, 1994).

A number of studies attest to youth engagement in high-risk behaviors for contracting HIV. Results from the 1993 Youth Risk Behavior Surveillance System revealed that nationally, 53% of high school students had engaged in sexual intercourse at least once; 18.5% of high school students had four or more sex partners; 58.2% of sexually active high school students had used a condom during their last sexual encounter; 32.8% ever used marijuana; and 1.4% of high school students had injected an illegal drug at least once during their lifetime (Kann, Warren, Harris, Collins, Douglas, Collins, Williams, Ross, & Kolbe. 1995). Lifetime prevalence data from the National Institute on Drug Abuse 1988 Drug Abuse Study revealed that nine million 12-17 year olds had ever used alcohol; 2.3 million had used marijuana; 3.4% had used illicit drugs; and 590,000 had used cocaine (NIDA, 1993). The 1987 National Adolescent Student Health Survey (NASHS) revealed that among a national sample of 8th- and 10th-grade students, 77% of eight-grade students and 89% of tenth-grade students had ever used alcohol, 15% of eighth graders and 35% of tenth graders had used marijuana and 4% of eighth graders and 6% of tenth graders had used cocaine (CDC, 1989).

In a survey of 1,773 Massachusetts adolescents between the ages 16 and 19, 61% reported that they had engaged in sexual intercourse in the past year. Among sexually active respondents, only 33% reported always using a condom, 32% reporting using a condom sometimes, and 37% reporting never using a condom. Regarding alcohol and drug use, those adolescents who

consumed five or more drinks per day were 2.8 times less likely to use condoms while those who used marijuana in the past month were 1.9 times less likely (Hingson, Strunin, Berlin, & Heeren, 1990).

A number of studies indicate that the use of non-injected drugs, including alcohol can increase one's risk for becoming HIV infected due to decreased inhibitions, impaired judgement, and the reduction of reluctance to participate in unprotected sexual intercourse. Hingson, et al. (1990) in a study of 1,773 Massachusetts 16-19 year-olds found that adolescents who consumed an average of five or more drinks per day were less likely to always use condoms than adolescents who were abstainers (29% versus 35%). Furthermore, those adolescents who had used other psychoactive drugs in the month prior to the survey were not as likely to always use condoms as adolescents who did not use psychoactive drugs.

Additionally, the association of drug abuse among adolescents and the exchange of sex for drugs, money, food, and shelter is well documented (CDC, 1993a).

Regarding intravenous drug use, IDUs are experiencing a greater increase in the number of new cases of AIDS than homosexual and bisexual men (Hammett & Moini, 1990). In a national sample of 904 IDUs between the ages of 13 and 21 (92% between the ages of 18 and 21) not in drug treatment, a 6.2% seropositivity rate was found. Although, not statistically significant, females (7.2%) had a slightly higher rate than males (5.9%). Respondents who reported engaging in sexual activity with someone of the same sex or with both sexes, exchanging sex for money, or reported a previous history of syphilis, demonstrated the highest rates of HIV infection (Williams, 1993). According to the Centers for Disease Control and Prevention (CDC), youth between the ages of 13 and 19 constitute approximately 1% of the total number of AIDS cases

(HIV/AIDS surveillance report, 1995). Although the actual number of HIV infected adolescents is unknown, it is believed to be much higher than the adolescent AIDS prevalence due to the 9-15 year incubation period for HIV (CDC, 1995). To date, a few national studies have focused on HIV prevalence among adolescents. Teenage applicants to the U.S. military between October 1985 and March 1989 had an overall seroprevalence rate of .34 in 1000. The rates for males and females were comparable. .35 and .32 per 1000. respectively (Burke, Brundage, Goldenbaum, Garner, Peterson, Visintine, Redfield, & the Walter Reed Retrovirus Research Group, 1990). Entrants to the Job Corp between 1987 and 1990, age 16-21, had an HIV seropositivity rate of 3.6 per 1000. The overall rate was higher in males (3.7 per 1000) than in females (3.2 per 1000). However, for entrants ages 16 and 17, the rate was higher in females (2.3 per 1000) than in males (1.5 per 1000). Geographically, the overall highest prevalence rate was found in the northeast, followed by the South, Midwest and West (St. Louis, Conway, Hayman, Miller, Petersen, & Dondero, 1991).

High teenage pregnancy rate and the increasing number of teenagers receiving treatment for STDs provide indirect indicators of sexual intercourse without the use of a condom. In the Unites States, each year, one million teenage females become pregnant and 3 million teenagers are infected with an STD (Kolbe, 1992).

#### Knowledge and Attitudes

In one of the first studies to assess adolescents' knowledge and attitudes, Price, Desmond, and Kukulka (1985) found that, among 250 Ohio high school students only 27% of respondents were personally worried about contracting AIDS and between one half and three-fourths of these adolescents

did not understand how HIV is transmitted although they were knowledgeable about high-risk groups. In contrast, DiClemente, Zorn and Temoshok, (1986) in a survey of 1,326 adolescents enrolled in Family Life Education classes at 10 high schools in San Francisco, found that 92% of respondents were aware that HIV could be transmitted through sexual intercourse. However, only 60% correctly reported that using a condom during sexual intercourse could lower the risk of HIV transmission. Although 66% of the San Francisco respondents reported being worried about AIDS, over half reported that they are "less likely than most people to get AIDS."

Diclemente, et al. (1986) attributed the apparent greater knowledge and higher awareness of the San Francisco group to the location of participants near the AIDS epicenter. However, Diclemente, Brown, Beausoleil and Lodico (1993) compared knowledge, attitude and behavior data of adolescents living in low AIDS or HIV prevalence communities with that of adolescents living in high AIDS prevalence communities and found that although both populations revealed high levels of AIDS knowledge, those adolescents in a rural area were more knowledgeable about AIDS than their inner-city counterparts.

In a study assessing AIDS knowledge and attitudes of 90 9th- and 10thgrade students from two Tennessee urban high schools before and after an AIDS education program, 75% or more of male and 75% of female respondents correctly answered 64% and 55%, respectively, of the knowledge questions (Steitz & Munn, 1993). DuRant, et al. (1992) assessed the knowledge and perceived risk of 2,483 11th- and 12th-grade students in a southeastern community and found that 97.3% of the students knew that sharing needles with an infected person was a means of HIV transmission. However, some adolescents held several misconceptions about prevention that could increase their risk for becoming infected with HIV. For example, 17.4% of the students believed that birth control pills are effective in preventing HIV transmission.

Additionally, a large minority (25.7%) thought it possible to determine the HIV status of another person by looking at them.

#### HIV and High-risk Adolescents

Adolescents who engage in unprotected sexual intercourse, those who have multiple sexual partners, and adolescents who use illicit drugs and alcohol are at highest risk for becoming HIV seropositive (Melchert & Burnett, 1990; Morrison, et al., 1994; National Commission on AIDS, 1994; Rotherman-Borus, & Kooperman, 1991; Yarber, & Parrillo, 1992). Several subgroups of adolescents, including homeless and runaway youth, minority youth, and incarcerated youth, engage in more than one of these high risk activities, and thus are considered most vulnerable for contracting HIV (DiClemente, Lanier, Horan, & Lodico, 1991; Fullilove, Golden, Fullilove III, Lennon, Porterfield, Schwartz, & Bolan, 1993; National Commission on AIDS, 1994; Rotheram-Borus, Kooperman, & Ehrhardt, 1991; Stricoff, Kennedy, Nattell, Weisfuse, & Novick, 1991; Strunin, 1991).

## Runaway and Homeless Youth

Homeless youth, because of participation in high-risk behaviors, are emerging as a subgroup of adolescents at high risk for HIV infection. Homeless youth, totaling about 1.5 million in the United States are defined by Rotheram-Borus, Kooperman, and Ehrhardt (1991) as "those who have left their homes without a parent's or guardian's consent (runaways), those who are thrown out of their homes (throwaways), those who leave problematic social service placements (system kids), and those lacking basic shelter (street youths)" (p. 1188). Homeless youth are at risk for HIV infection due to their drug abuse and sexual behaviors, as well as other problem behaviors that reduce their ability to

demonstrate effective coping responses. According to Rotheram-Borus. Kooperman, and Ehrhardt (1991), in order to survive economically, homeless youth are subject to live in neighborhood with high HIV prevalence rates and to become involved in sexual and substance abuse behaviors that increase their risk for becoming infected with HIV. Moreover, the National Commission on AIDS (1994) reports that approximately 1 to 1.3 million teenagers, in an attempt to escape conflict, violence and abuse, run away from home every year. Many of these runaways engage in the exchange of sexual activity for money, food shelter, or drugs, thus increasing their risk for contracting HIV. Stricoff, et al., (1991) in a study of runaway and homeless youth at Covenant House, a facility serving runaway and homeless youth in New York, found an overall HIV prevalence rate of 5.3%. Research participants consisted of adolescents between the ages of 15 and 20 who were receiving health care. Over a 27month period, 2,667 specimens were analyzed. Ninety-one percent of participants were sexually active, with an average 2.8 and a range of 1 to 20 sexual partners per week. Twenty-nine percent had ever exchanged sex for food, money, shelter, or drugs. Drug use was extremely high, with 80% admitting to using alcohol, 68% marihuana, 48% cocaine, 38% crack, and 6% intravenous drug use.

In a study of 302 runaways (154 males, 148 females), aged 11-19, residing in four New York City area residential facilities, drug and alcohol use was prevalent and was found to be significantly related to an increased number of sexual partners and low condom use. Seventy percent of runaways in this

study reported ever using alcohol, while 43% admitted to ever using marijuana, 19% crack/cocaine, and 14% hallucinogens. The majority (63%) of runaways admitted to current sexual activity, with an average of two sexual partners. Only half of those participating in penile-vaginal intercourse reported using condoms. Condom use during oral sexual encounters was also very low, but was higher during anal sexual intercourse (Kooperman, Rosario, & Rotheram-Borus, 1994).

Research studies also show that homeless adolescents, in addition to participating in more sexual and drug use high-risk behaviors than the general adolescent population, are less knowledgeable about HIV/AIDS than the general adolescent population (Rotheram-Borus, Kooperman, & Ehrhardt, 1991).

HIV and Racial/Ethnic Minority Adolescents

African-American and Hispanics are disproportionately represented in the number of reported AIDS cases. While African-Americans constitute only 12% of the United States total population, and Hispanics only 8%, they constitute 32% and 16%, respectively, of the total adult/adolescent AIDS cases.

Additionally, African-Americans account for 55% of the pediatric AIDS cases and 33% of all AIDS cases for youths between the ages of 13 and 19. Hispanics between the ages of 13 and 19 make up 20% of the total AIDS cases for this age group (CDC, 1995).

Studies indicate that racial/ethnic minority adolescents are at increased risk for HIV infection. African-American teenage applicants to the U.S. military between October 1985 and March 1989, had an HIV seroprevalence rate of 1.06 per 1000 compared to an overall seroprevalence rate of .34 in 1000 (Burke, et

al. 1990). Similarly, in a national study involving 16 to 21 year old entrants to the Job Corp between 1989 and 1990, African-American males and Hispanic males had HIV seropositivity rates of 5.5 and 3.0 (per 1000), respectively, compared to white males who had a rate of 1.4 (St. Louis, et al., 1991).

In a national sample of 904 IDUs between the ages of 13 and 21, not in drug treatment, an overall 6.2% seropositivity rate was found. However, African-Americans had the highest rate (10.3%), followed by Whites (6.6%), and Hispanics (5.3%) (Williams, 1993).

Regarding HIV knowledge and attitude, DiClemente, Boyer, & Morales (1988) in a study of 261 White, 226 Black and 141 Latino adolescents enrolled in Family Life Education class at the 10 largest high schools in the San Francisco Unified School District, found substantial racial/ethnic differences.

Black and Latino youth were less knowledgeable about AIDS and held more misconceptions than White youth. While all groups were aware that the disease could be acquired through sharing intravenous needles and having sexual intercourse with an infected person, only 59.9% of Black adolescents and 58.3% of Latino adolescents correctly reported that using a condom during sexual intercourse could lower risk of HIV transmission compared to 71.7% of White adolescents.

In contrast, some studies show little difference between ethnic/racial minorities and white adolescents. For example, Hingson, et al. (1990), in a telephone survey of 1,773 Massachusetts adolescents (age 16-19) in which 61% had been sexually active in the past year, 28% of African-American compared to

31% White reported always using a condom during sexual intercourse. Thirtynine percent of Hispanics reported always using a condom. Seventy-four
percent of African-American adolescents admitted to having had sexual
intercourse in the past year compared to 63% of Whites and 61% Hispanics.
Sixty-nine percent of African-Americans reported that they were worried about
contracting AIDS compared to 73% of Whites and Hispanics. Additionally, in
response to being asked if they had changed any of their behavior due to their
worry over contracting the disease, 58% of Hispanics and 51% of AfricanAmericans compared to 40% of Whites reported that they had made some
changes.

A difference exists in the pattern of HIV transmission among minorities. African-American AIDS-diagnosed males are more likely than Hispanic and White male adolescents to have been involved in homosexual activity. Whereas, Hispanic males with AIDS are more likely than African-American males and White males to have injected drugs (Rotherman-Borus, & Kooperman 1991). Harper (1992), in a study exploring ethnic and gender differences in incarcerated adolescents' engagement in AIDS/HIV high risk behaviors, found that minority males and females were more likely than their white counterparts to engage in drug and alcohol use prior to sexual activity.

## HIV and Incarcerated Youth

Youths incarcerated in detention facilities are predominantly males (more than 85%) and of racial or ethnic minority (Council on Scientific Affairs, 1990).

African-Americans comprise 42% of detained adolescents, while Hispanics

account for 15% (Morris, Baker, & Huscroft, 1992). The majority of detained youths (82%) are between the ages of 14 and 17, with an average age of 15.7 years (Council on Scientific Affairs, 1990). The period of incarceration varies greatly and is influenced by a number of factors including the juvenile's current charge(s) and delinquent history, overcrowding of jail or detention facility, and the court calendar (Morrison, et al., 1994). As reported by the Council on Scientific Affairs (1990), short-term facilities, such as detention centers detain youth for an average of 12 days, while long-term facilities generally detain youth for an average of eight months. The majority of confined youth (95%) are detained due to legal offenses including, property offenses, offenses against persons, drug and alcohol use related offenses, and probation violations. Additionally, approximately 40% of youth referred to juvenile court have committed previous offenses.

The majority of individuals processed through urban jail systems have at least one illegal drug in their system at the time of arrest (McBride and Inciardi, 1990). In a recent NIDA-funded study of 12,000 injecting drug users (IDUs), 40% reported that they had spent some time in jail or prison within the last six months (Baxter, 1991). IUD's are the second largest group with AIDS in the United States and the principle exposure group in the correctional system (60%) (Gellert, et al., 1993). In addition, IDUs are experiencing a greater increase in the number of new cases of AIDS than homosexual and bisexual men (Hammett & Moini, 1990b).

# HIV Risk Behaviors

Incarcerated adolescents comprise a group at high risk for a number of health and health-related problems, including HIV and AIDS. According to the Council on Scientific Affairs (1990), youth detained in correctional facilities have

a greater than expected rate of selected health problems, including substance abuse, sexually transmitted diseases, unplanned pregnancies, and psychiatric disorders due to their personal behavior and their lack of adequate prior health care services.

According to the National Commission on AIDS (1994), "research suggests that incarcerated adolescents lack a future orientation, have poor self-image, and perceive little or no value in modifying risk behavior" (p. 42).

Incarcerated youth participation in HIV high-risk activities is evidenced by the health status of these incarcerated youth (Council on Scientific Affairs, 1990). Blind studies involving 16- and 17-year olds incarcerated in detention centers in Los Angeles County, California revealed that three of 1,870 had a HIV seropositive test compared to 2 of 2,000 in 1989 and 4 of 2,000 in 1991 (Baker, & Morris, 1992).

In a study assessing sexually transmitted disease prevalence among females detained in the King, County, Washington, juvenile facility, it was revealed that 18% of 98 respondents were found to have *N. gonorrhoea* and 20% of 86 respondents were positive for *C. trachomatis*. Of 85 tested for *Neisseria gonorrhoea* and *Chlamydia trachomatis*, 32% were found to be infected with either one. However, none of the 61 detainees screened for syphilis tested positive. Sixty-seven percent of 98 respondents reported no contraceptive use, while 23% reported using foam and/or condoms and 8% reported oral hormone use (Bell, Farrow, Stamm, Critchlow, & Holmes, 1985).

In a similar study examining sexual behavior and sexually transmitted diseases among 966 detained male adolescents, 4.5% of detainees were infected with *Neisseria gonorrhoea*, 6.9% *Chlamydia trachomatis*, and 0.9% of detainees had a reactive syphilis serological test. Twelve percent of those tested for all three infections had at least one STD. Fifty-nine percent of those

responding reported using a condom during their last sexual encounter and 37% reported consistent condom in the previous four months (Oh, Cloud, Wallace, Reynolds, Sturdevant, & Feinstein, 1994).

Pre-test counseling for voluntary HIV antibody testing conducted among 16 and 17 year old juveniles incarcerated in juvenile detention centers in Los Angeles County, California exposed a group at very high risk for contracting HIV. More than 90% of these youth admitted to having had sexual intercourse. Also, these detainees had a history of multiple sexual partners, low condom use, high incidence of previous treatment for sexually transmitted diseases (STDs), and high prevalence of multiple drug use, including 9% injecting drug use (IDU) (Baker, & Morris, 1992).

Drug and alcohol use by this population is higher than among the general adolescent population and may increase the likelihood that these adolescents may engage in high-risk sexual practices. According to the Council on Scientific Affairs (1990), a nationwide survey of detained juveniles revealed that 63% of respondents used drugs regularly, and 32% and 39% respectively, were under the influence of alcohol and another drug when they committed their offense.

Melchert and Burnett (1990) in a study to examine the high-risk sexual behaviors of 212 adolescents involved with Dane County, Wisconsin juvenile detention facility found that, compared to adolescents in the general population, these respondents had a very early mean age (12.5 years) at first intercourse and a high rate of pregnancy (27%).

Morrison, et al. (1994), in a study of 119 juveniles in a detention facility found these adolescents to be at high risk for HIV infection, relative to the general adolescent population. These juveniles had their first sexual intercourse at an early age (12.5), had high rates of heterosexual activity, and had high numbers of sexual partners. Additionally, one-third of these adolescents had

used condoms the last time they engaged in sexual activity with their primary or steady partner, while about half had used condoms with their casual partners.

Results from a study involving incarcerated adolescents and public high school students also found that incarcerated youth tended to have higher rates of HIV risk behaviors. Ninety-nine percent of detained youth reported being sexually experienced compared to 28% of their school-based counterparts. Fifty-two percent of incarcerated youth reported sexual onset by age 12, compared to 26% of the high school sample. Additionally, 73% of incarcerated youth reported two or more sexual partners during the past year, compared to 8% of public school youth (DiClemente, et al, 1991).

Results from a study assessing beliefs about condoms and their association with intention to use condoms among 201 juveniles in a detention facility indicate that these adolescents "had engaged in behaviors that put them at high risk of acquired immunodeficiency syndrome (AIDS) and other sexually transmitted diseases" (Gillmore, Morrison, Lowery, & Baker, 1994, P. 228.)

Knowledge and Attitudes about HIV

In a study assessing knowledge and attitudes among 119 juveniles in a detention center, it was revealed that these adolescents had moderately positive attitudes towards condom use and were generally knowledgeable about AIDS. However, these adolescents were at high risk, relative to the general adolescent population. (Morrison, et al., 1994).

Lanier and McCarthy (1989a), in a study to assess incarcerated adolescents' knowledge and concern about AIDS, found that most of the 393 juveniles who comprised 86% of the custodial population of the Alabama Division for Youth Services (DYS) were aware that AIDS is preventable, that it is not casually transmitted, and that sharing IV drug needles is a high-risk

behavior. However, one-third believed that condoms are not effective means of preventing transmission. While 60% of these juveniles were concerned about their own risk of acquiring AIDS and 57% were concerned about their friends becoming infected, a large minority (18%) agreed with the statement "AIDS is a made up problem by the government to decrease drug use and sexual activity'. Eleven percent was uncertain. In a study comparing beliefs about AIDS among four subgroups of adolescents: urban public school students; suburban private school students; youth incarcerated in a detention facility; and gay adolescents, incarcerated adolescents were less knowledgeable, in lower agreement with AIDS health guidelines, had lower perceived personal threat of acquiring AIDS, and had lower personal self efficacy, compared to the other three groups (Nader, Wexler, Patterson, McKusick, & Coates, 1989).

Diclemente, et al. (1991) compared HIV knowledge data of incarcerated adolescents with that of public high school students and found that, while both populations demonstrated a high level of AIDS knowledge, substantial differences were present. Mainly, incarcerated youth were less aware of risk reduction behaviors. For example, only 56% of incarcerated youth correctly identified "not having sexual intercourse with a person who uses illegal drugs that can be injected" as a risk-reduction strategy, compared to 72% of public school youths.

Katz, Mills, Singh, and Best (1995) in a study comparing AIDS knowledge and attitudes of 802 public high school students, incarcerated delinquents, and emotionally disturbed adolescents, found that while AIDS knowledge was moderately high in all three groups, incarcerated adolescents were slightly less informed about AIDS, less likely to believe that condoms can prevent disease transmission, more likely to feel powerless to protect themselves, and more sexually permissive.

## HIV Prevention Programs and Adolescents

Public education and voluntary behavior changes have been cited by the U.S. Surgeon General as being the most effective means to combat the spread of HIV disease (Surgeon General's Report, 1986). The U.S. public school system has the capacity to reach 45.5 million school-age youth annually (Allensworth, & Symons, 1989).

In response to a 1986 Surgeon General's report and in an attempt to curb the spread of HIV within the adolescent population, many public school systems hastily developed and implemented knowledge-based AIDS education programs which generally lacked a theoretical framework (Siegel, 1993). According to the National Commission on AIDS (1994), "If information about the consequences of unhealthy or risky behaviors were sufficient to motivate people to adopt health behaviors, no one would smoke, everyone would wear a seat belt, all doctors' recommendations about diet and exercise would be followed, and there would be no drunk driving" (pp. 45-46).

In order to be most effective, comprehensive HIV prevention programs must utilize strategies which combine cognitive and behavioral skills training, must be designed to be age appropriate, sensitive to cultural values, religious beliefs, sex roles, and attitudes and customs within the targeted population, and must provide access to services (Boyer, & Kegeles, 1991; DiClemente, 1993a; DiClemente, Brown, et al., 1993; Fisher & Fisher, 1992; Gillmore, Morrison, Richey, Balassone, Gutierrez, & Farris, 1997; Kooperman, et al, 1994; & National Commission on AIDS, 1994; ). Additionally, according to Boyer and

Kegeles (1991), "Effective prevention programs should be based on models and theories of risk behavior so that the programs can be designed to change those factors which lead to the undesirable risky behaviors" (p. 11). Several theories have evolved that attempt to explain and predict human health behavior.

The Health Belief Model (Becker, 1974) has been widely used by health education professionals in explaining and predicting health behavior. The Health Belief Model (HBM), originally developed as a conceptual framework for explaining preventive behaviors, was formulated in the 1950s by a group of social psychologists, including Hochbaum, Leventhal, Kegeles, and Rosenstock. It is derived from the social-psychological theory of Lewin, Becker and others. Dimensions of the HBM include perceived susceptibility (subjective perception of the risk of contracting a health condition), perceived severity (personal evaluation of medical/clinical and social consequences posed by the health condition), perceived benefits (assessment of the effectiveness of actions recommended to reduce the disease threat), and perceived barriers (feelings related to negative consequences of the recommended health action). In an effort to improve its predictive power, the HBM was later expanded to include self-efficacy (Janz and Becker, 1984; Rosenstock, Strecher, and Becker, 1988). The Theory of Self-efficacy, first presented by Bandura (1977) is defined as ones perception that one can successfully perform preventive behaviors. According to Bandura (1977), "expectations of personal efficacy are derived from four principal sources of information: performance accomplishments. vicarious experience, verbal persuasion, and physiological states. The more

dependable the experiential sources, the greater are the changes in perceived self-efficacy" (p. 191).

Although a significant amount of research suggest difficulties of the HBM in predicting HIV-related behaviors (Brown, DiClemente, & Reynolds, 1991; Montgomery, Joseph, Becker, Ostrow, Kessler, & Kirscht, 1989), several studies have validated the HBM's, (or more frequently, constructs of the model) usefulness in successfully predicting HIV-preventive behaviors. For example, in a study of 1,1773 Massachusetts youth between the ages of 16-19, Hingson, et al. (1990) found that respondents were "more likely to always use condoms if they felt susceptible to AIDS; believed condoms are effective; perceived few barriers to condom use; and were exposed to more cues to action" (p. 296). Similarly, data from a study of 424 male and female undergraduate students at six United States schools revealed that, "susceptibility, self-efficacy, and social support were the most important predictors for current sexual behavior and for sexual behavior changes" (Steers, Elliott, Nemiro, Ditman, and Oskamp, 1996, p. 107).

Further support for the utility of the HBM to predict health behavior is evidenced in a study by Petosa and Wessinger (1990) to determine the HIV education needs of seventh, ninth, and eleventh grade adolescents. Results suggest that while these youth perceived themselves to be highly susceptible to contracting HIV, they failed to understand the severity of the disease. Additionally, a large minority reported that condoms are embarrassing to use and that it is difficult to discuss sexual histories with a partner.

The Theory of Reasoned Action (Fishbein, & Ajzen, 1975) is a cognitive theoretical model suggesting that specific behavioral intentions are the determinants of behavior and that, the intention to perform a particular behavior is determined by the attitude towards performing the behavior and the perceived social norms regarding the behavior.

The AIDS Risk Reduction Model (ARRM) (Catania, Kegeles, & Coates, 1990) is a psychosocial conceptual model designed to examine people's efforts to change sexual behavior in order to avoid contracting HIV through sexual transmission. The ARRM incorporates elements of several prior models including the Health Belief Model, self-efficacy theory, the Theory of Reasoned Action, the Theory of Planned Behavior, emotional influences, and interpersonal processes. According to the ARRM, behavior change is a process occurring in three stages: (1) recognition and labeling of one's sexual behaviors as high risk for contracting HIV: (2) making a commitment to reduce high-risk sexual contacts and increase low-risk activities; and (3) seeking and enacting strategies to obtain these goals. Variables hypothesized to influence the recognition and labeling stage include knowledge of sexual activities associated with HIV transmission, the belief that one is personally susceptible to contracting HIV, the belief that having AIDS is undesirable (aversive emotions), and social influences, including social networks and social norms.

The commitment stage is reflective of a decision-making process that may also include decisions to remain undecided, wait for the problem to resolve itself or resign oneself to the problematic issue. Factors hypothesized to influence

this stage include perceived costs and benefits, self-efficacy, knowledge and perception of enjoyment and risk reduction, and social influences.

The final stage, enactment includes information-seeking, obtaining remedies, enacting solutions and social influences. Verbal communication with sexual partners regarding sexual issues is a key component of the enactment stage. According to Catania, et al. (1990), the ARRM is based on the premise that progress from one stage to the next is expected to be dependent on successfully completing the goals of the prior stage.

While the ARRM was originally developed to examine sexual behaviors and to be used with adult populations, with minor modifications, it is believed to be applicable to other HIV risk behaviors, as well as to adolescent populations (Catania, et al., 1990; and Boyer, & Kegeles, 1991).

The majority of the HIV/AIDS studies that have examined the utility of the ARRM have provided either supportive or mixed results. Kowalewski, Longshore, and Anglin (1994) in a study to examine the predictive ability of the first two stages of the ARRM for intentions to use condoms among 21-59 year old injecting drug users (IDUs) who had used them in the year prior to the interview and IDUs who had not found that, drug users' intentions to use condoms were strongly related to their social network.

Malow, Corrigan, Cunningham, West, and Pena (1993) in a study to assess psychological factors associated with condom use among adult African-American drug abusers, also presented data in support of key constructs of the ARRM. Condom users reported significantly higher levels of self efficacy,

communication skills, condoms use skills, and communication skills than noncondom users

Results from a study to examine the ability of the ARRM to explain factors motivating condom use among HIV-infected women (Kline and VanLandingham, 1994) suggest that, HIV-positive women who use condoms possess higher levels of perceived self-efficacy to influence the partner's sexual behavior than those who do not use condoms.

Lanier (1996), in a study to examine the primary constructs of the ARRM among juveniles detained by the Department of Youth Services in a southern state, found that response efficacy was significantly related to every aspect of the AIDS reduction behavior, and that knowledge and susceptibility were "highly associated with several specific AIDS reduction behaviors with high marginal influence" (p. 545).

## Adolescents

Although school-based HIV prevention programs are a requirement of the majority of states and school districts, the initial focus of these programs was on increasing students' knowledge and changing their attitudes. Several of these knowledge-based programs have proven to be highly successful. For example, Brown, Fritz, Barone (1989), in a pilot study to assess the impact of an AIDS education program on 313 seventh and tenth grade students, found that students demonstrated an increase in AIDS information, positive attitudes toward prevention, and tolerance for people with AIDS after participation in the program. The intervention covered two class periods and included lecture and video material regarding HIV transmission and prevention. A study by Huszti, Clopton, and Mason (1989) also assessed the efficacy of a lecture/video

education program presented to tenth grade students enrolled at two suburban public schools in the Oklahoma City area. Participants were randomly assigned to one of three groups; an intervention group receiving HIV/AIDS information via lecture, an intervention group receiving HIV/AIDS information via video, or to a control group receiving no educational intervention. Intervention group students demonstrated a greater increase in AIDS knowledge, more acceptance of people with AIDS, and more positive attitudes toward HIV risk reduction behavior than the control group. The effects of lecture were more effective than the effects of the video.

Ruder, Flam, Flatto, and Curran (1990) evaluated the impact of an HIV education program that consisted of a lecture presented by the Westchester County (New York) Health Department to junior and senior high school students. Results revealed that, students who received a brief 1-1/4 hour AIDS-information presentation demonstrated a significant increase in knowledge compared to students who did not received the presentation. Brown, Barone, Fritz, Cebollero & Nassau (1991) evaluated the efficacy of a state-mandated AIDS education program on a sample of 2,709 middle- and high-school student and found that, students receiving the educational intervention demonstrated greater increases in knowledge about AIDS, tolerance for people with AIDS, and future intentions to engage in risk reduction risk behaviors, compared with students in the control group. The educational program was composed of approximately five hours of information regarding the nature of AIDS and AIDS transmission and prevention. It utilized a variety of strategies including, lecture, audiovisual presentations, class discussion, handouts, and guest speakers.

Dixon (1994), in a study of 184 students assessed the effectiveness of an HIV education program presented to three groups of 9-18 year old pre-adolescents and adolescents. The program incorporated group discussions, a

question/answer session and a vignette that involved students playing the role of the virus. Results reveal that knowledge was increased in all three groups. In an evaluation of a discussion format-HIV/AIDS education program presented to 2,169 St. Louis high school students, Morton, Nelson, Walsh, Zimmerman, and Coe (1996) found that the educational intervention successfully increased students' knowledge of HIV/AIDS.

School-based HIV prevention programs have been proven to be efficacious in their ability to increase adolescents' knowledge and, to some degree, create desired attitudes about HIV and risk-taking behaviors. However, many of these programs appear to have failed in their ability to significantly delay and/or reduce HIV high risk behaviors among adolescents (Kirby, Korpi, Adivi, & Weissman, 1997; Newman, DuRant, Ashworth, & Gaillard, 1993; & Walter & Vaughan, 1993)

Research suggests that the most successful school-based HIV prevention program are those programs that are theory-based, include both cognitive and behavioral aspects, and are skilled-based (Allensworth & Symons, 1989; Longshore, 1990; Boyer & Kegeles, 1991; Fisher & Fisher, 1992; Jemmott, Jemmott, & Fong, 1992; DiClemente, 1993; & National Commission on AIDS, 1994). However, only three states currently provide school-based programs that address cognitive, affective, and skills domains (DiClemente, 1993). According to DiClemente (1993), the failure of schools to incorporate all three domains in prevention programs is the result of social and political barriers.

To date, only a few of these programs have been evaluated. Main, Iverson, McGloin, Banspach, Collins, Rugg, and Kolbe (1994) evaluated the impact of a 15-session (day) skills-based curriculum on 979 urban ninth- and eleventh-grade students enrolled in seventeen Colorado schools. The education program was based on the Social Cognitive Theory and the Theory of

Reasoned Action. Twenty-five teachers, the majority of whom taught health, implemented the program after a five-day, 40 hour training program. However, the program failed in its attempt to postpone the onset of sexual intercourse and reduce the percentage of students currently engaging in sexual and drug use behaviors that place them at risk for HIV infection. The intervention students demonstrated greater knowledge regarding HIV and greater intent to engage in HIV risk reduction behaviors, and were more likely to believe that adolescents their age who participate in HIV high risk behaviors are susceptible to HIV infection than comparison group students. Additionally, at the 6-month follow-up, sexually active-intervention students reported fewer sexual partners and greater frequency of condom use.

In a study to assess the effectiveness of a teacher-delivered HIV risk-reduction program in modifying AIDS-related knowledge, beliefs, self-efficacy and behaviors among 867 ninth- and eleventh-grade students, Waiter and Vaughan (1993) found "Significant (albeit modest) effect favoring intervention were observed for knowledge, beliefs, self-efficacy, and risk behaviors scores at a three month follow-up" (p. 725). The cognitive-, behavioral- and skills-based education program was based on the Health Belief Model, the Social Cognitive Theory, and a model of social influence. The 6 one-class period lessons conducted on consecutive days were implemented by regular classroom teachers who had received eight hours of in-service training.

Boyer, Shafer, and Tschann's (1997) evaluation of a knowledge- and cognitive-behavioral skills-building intervention to prevent STDs and HIV infection in high school students revealed that, although the intervention did not have a significant impact on HIV knowledge and high risk behaviors, it did enhance intervention-group participants' skills to prevent risky sexual and substance use behaviors

## High-risk Adolescents

Adolescents who are at highest risk for becoming HIV infected are also those youths who have, more than likely, dropped out of school and thus lack the opportunity to benefit from school-based education programs (National Commission on AIDS, 1994). Additionally, in-school youth that have high rates of absenteeism do not benefit fully from school-based HIV/AIDS prevention programs.

According to the National Commission on AIDS (1994), "Out of school youth have been documented as suffering from depression, anxiety, and low self-esteem" (p. 42). These youths often engage in HIV high-risk sexual behaviors as well as use drugs, including alcohol. Additionally, minority youth, particularly African-American youth, are a growing segment of the population who engage in HIV high risk behaviors as evidenced by high STD and pregnancy rates. In order to effectively address the specific HIV educational needs of these youth, HIV prevention programs targeting African-American youth, must address the attitudes and cultural values related to sexuality issues (Pittman, Wilson, Adams-Taylor, & Randolph, 1992).

Several studies have evaluated the efficacy of non-school- based HIV education programs. A few of these programs targeting adolescents at highest risk for HIV infection have demonstrated effectiveness among runaway, minority, and substance abusing adolescent populations. Rotheram-Borus, Kooperman, Haignere, and Davies (1991) in a study to assess the impact of a skill-based HIV prevention program among 145 runaways between the ages of 11 and 18 at two New York City publicly funded runaway shelters found that, as the number of interventions sessions increased, so did the adolescents' reports of consistent condoms use and decreases in engagement of high risk behaviors at three- and six-month follow-ups. Seventy-eight runaways at the intervention shelter

participated in an average of 11 (minimum of three) prevention sessions that presented general information regarding HIV/AIDS information and addressed coping skills, access to health care and other resources, and individual barriers to safer sex. Sixty-seven runaways at another shelter, comparable to the intervention site shelter served as the comparison group.

Jemmott, et al. (1992) conducted and evaluated an HIV reductionprogram with inner city African-American males. The program was successful in
reducing HIV high-risk behaviors among adolescents who received the
intervention. A total of 157 participants with a mean age of 14.64 were recruited
from a Philadelphia outpatient medical clinic, a local high school, and a local
YMCA. Participants were randomly assigned to a 5-hour small-group AIDS riskreduction intervention or to a control group receiving a career opportunity
workshop. Compared to control group participants, intervention group
participants demonstrated greater AIDS knowledge and reported less sexual
activity, fewer sexual partners and greater condom use at the 3-month follow-up.

Kipke, et al. (1993) assessed whether inner-city minority adolescents who were randomly assigned to an AIDS Risk Reduction Education and Skills Training (ARREST) program would demonstrate greater pre- to post-test knowledge and attitudes about HIV/AIDS, perception of risk and self-efficacy in prevention, and behavioral skills for reducing HIV risk than would those assigned to a wait-list control group. The sample consisted of eighty-seven Latinos (59%) and African-American adolescents, ages 12-16 years who were recruited from three New York City community-based agencies. Forty-one ARREST program adolescents participated in three 90-minute weekly sessions facilitated by two AIDS educators and consisting of small group discussions and skills-building activities. Results reveal that the ARREST program intervention was ineffective in modifying adolescents' high-risk sexual behaviors, such as

number of sexual encounters, number of sexual partners, and use of condoms. However, compared to the comparison group, the ARREST group demonstrated greater HIV/IAIDS knowledge, decreases in negative attitudes, perceived risk of infection, and assertiveness and behavioral skills.

St. Lawrence, Brasfield, Jefferson, Alleyne, O'Bannon, and Shirley (1995) assessed the impact of a cognitive-behavioral intervention on African-American adolescents' risk for HIV infection. Two hundred forty-six African-American adolescents were randomly assigned to an 8-week HIV/AIDS prevention program, receiving a combination of HIV/AIDS education and behavior skills training, including condom use, social competency skills, and cognitive competency skills or an educational intervention, receiving HIV/AIDS information only. The results show that adolescents participating in the educational/behavior skills program demonstrated a greater increase in condom use and risk reduction skill compared to participants receiving the educational program post-intervention and through a 1-year follow-up. Additionally, among adolescents who were sexually abstinent upon beginning the educational programs, adolescents receiving the education/behavior skills program delayed the onset sexual activity to a greater degree compared to the educational program participants.

Regarding substance-abusing adolescents, St. Lawrence, Jefferson, Banks, Cline, Alleyne, and Brasfield (1994) developed and assessed the effectiveness of a cognitive-behavioral HIV/AIDS prevention program on lowering substance-dependent adolescents' risk for acquiring HIV. Nineteen adolescents residing in the only residential treatment program serving substance-dependent minors in the state of Mississippi received a 5-session HIV risk-reduction program that included risk education, social competency skills, technical skills, and problem-solving skills. Results reveal an "increased"

knowledge about HIV/AIDS, more favorable attitudes toward prevention, greater internal and lower external locus of control scores, more favorable attitudes toward condom use, increased self-efficacy, and greater recognition of HIV vulnerability" (p. 425).

In a similar study with similar results, 34 adolescents in a residential substance abuse treatment program were randomly assigned to a standard HIV education program or a 6-session risk-reduction program that combined HIV education and behavior skills training. Adolescents participating in the education/behavior skills program demonstrated increased HIV/AIDS knowledge, more positive attitudes toward HIV risk-reduction behaviors and condom use, more internal locus of control and increased self-efficacy and increase recognition of personal risk for HIV infection compared to the education program adolescents (St. Lawrence, Jefferson, Alleyne, & Brasfield, 1995).

Only a few studies have targeted youth in juvenile facilities and to date, none have considered adolescents incarcerated in adult facilities. Lanier and McCarthy (1989b) assessed the AIDS knowledge, attitudes, and behaviors of adolescents in a detention facility and evaluated the impact of an AIDS educational program among these adolescents. Results indicate that the intervention successfully increased juveniles' HIV/AIDS knowledge and influences their attitudes toward AIDS.

# Summary/Conclusion

Adolescents in general are at risk for HIV infection due to their participation in high-risk behaviors, such as drug use and unprotected sexual intercourse. Research reveals that minority youth, homeless youths and runaways, and incarcerated youth are subgroups of adolescents who are at

increased risk due higher prevalence of HIV high risk behaviors. Compared to the general adolescent population, incarcerated adolescents, the majority of whom are of ethnic or racial minority status are slightly less knowledgeable, tend to have more sexual partners, are more likely to use injecting drugs, more likely to use alcohol and drugs and less likely to use condoms.

Recently, adolescents have been acknowledged as one of three groups among who AIDS incidence rates are growing at the fastest rate. Although the gains in HIV knowledge from educational interventions since the beginning of the AIDS epidemic up to this point are indisputable, these gains have not translated into positive behavioral changes among adolescents. Thus, general agreement exists among HIV and AIDS experts that knowledge alone is not sufficient to eliminate or reduce adolescents' participation in HIV high-risk behaviors. As a result, there is increased awareness of the need for developmentally appropriate, culturally sensitive comprehensive HIV prevention programs that incorporate accurate information, exploration of values and attitudes, skills building, and access to services (National Commission on AIDS, 1994).

# CHAPTER 3 METHODS AND MATERIALS Introduction

This study identified specific HIV/AIDS education needs of juveniles incarcerated in the Escambia County, Florida jail and developed an appropriate educational intervention for these youth to reduce their risk for contracting HIV/AIDS. The intervention will enable educators to more effectively educate incarcerated juveniles about high-risk behaviors including substance abuse and unsafe sex practices. The objectives of this study were to determine the:

- Demographic characteristics that describe juveniles incarcerated in an adult facility who are at high risk for HIV infection:
- High-risk behaviors related to HIV/AIDS reported by juveniles detained in these correctional facilities;
- Level of HIV/AIDS knowledge of juveniles detained in these correctional facilities;
- Attitudes related to HIV/AIDS of juveniles detained in these facilities;
- Components of a potentially effective HIV/AIDS prevention program based on the AIDS Risk Reduction Model for juveniles detained in an adult correctional facility.

Each objective was analyzed utilizing information obtained from the UCF AIDS/HIV Questionnaire (Appendix A) and the UCF AIDS/HIV Risk Assessment

Interview (Appendix B). For objectives one through four, responses from the juveniles in the adult correctional facility were compared with those of youth detained in a juvenile detention facility.

This chapter includes the following sections: (1) research participants, (2) settings, (3) instrumentation (4) procedures and (5) data analysis.

Approval for this study was obtained through the University of Florida Institutional Review Board (Appendix C).

## Research Participants

The study was conducted between the months of March and October 1996. Survey participants consisted of a total of 124 juveniles (107 males, 16 females, one missing observation). Interview participants consisted of a total of 45 juveniles (41 males and 4 females). Participants were detained in two correctional facilities, an adult facility (Escambia County, Florida jail) and a juvenile detention center (DISC Village). Seventy-nine of the survey participants (65 males and 13 females) and 23 of the interview participants (19 males and 4 females) were under the supervision of DISC Village detention facility. All detention center female participants were in the RAFT program located in Woodville, Florida. Male participants were detained in Greenville Hills Academy located in Greenville. Florida. Forty-five survey participants (42 males and 3 females) and 22 interview participants (all males) were detained at the Escambia County, Florida jail located in Pensacola, Florida. Study participants were between the ages of 11 and 18. Any Escambia County, Florida jail juvenile who is at least 18 years old or who reaches the age of 18 while detained in the jail is

automatically adjudicated an adult and is then housed in the adult section of the jail. As a result, no 18 year-olds were included in the jail group.

All juveniles incarcerated in the two facilities between March-October, 1996 were invited to participate in the study.

## Research Settings

This study was conducted in two northwest Florida correctional facilities, an adult facility and a juvenile detention facility (DISC Village). Research participants detained in the adult facility were detained in the Escambia County. Florida iail, located in Pensacola, Florida, Male participants were located in the juvenile section of the jail while female participants were detained in the jail's infirmary. The Escambia County, Florida jail maintains a daily population of approximately 42 juveniles with an average age of 16. The majority of juveniles are of racial/ethnic minority status (61%) and male (98%). The average length of stay is 6 months. None have been sentenced. Once a juvenile has been sentenced or reaches age 18, he/she is adjudicated an adult. The majority have not attended school in the last two years and the reading level is low. Two to three may be considered mildly mentally retarded or borderline intellectual functioning. The majority of these juveniles live with relatives (aunts, uncles, grandparent, or parents) and one to two are in the custody of the Florida Department of Children and Families.

Participants incarcerated in DISC Village Detention facility were housed in two separate facilities located approximately 75 miles apart. Female participants were located in Woodville, Florida, a community approximately 20

miles south of Tallahassee. Male participants were incarcerated in Greenville Hills Academy, located approximately 60 miles east of Tallahassee in the town of Greenville. Florida.

#### Instrumentation

This study employed two instruments. First, the University of Central Florida (UCF) AIDS/HIV Questionnaire (Appendix A) was developed specifically to determine AIDS-related knowledge, attitudes and behaviors of adolescents (Lanier, 1989) and has been used extensively in assessing and predicting incarcerated adolescents' AIDS-related knowledge, attitudes, and behaviors (Lanier & McCarthy, 1989a; Lanier & McCarthy, 1989b; Lanier, DiClemente, & Horan, 1992; Lanier and Gates, 1993; & Barthlow, Horan, DiClemente, & Lanier, 1995). The instrument was initially developed by selecting items from previous epidemiological studies of adolescents' knowledge, attitudes, and high risk behaviors regarding AIDS (Lanier and McCarthy, 1989). The questionnaire included 73 items and was divided into 4 sections for analysis: knowledge (19 items), attitude (26 items), behavior (23 items), and socio-demographic (5 items).

A brief description of each construct follows:

- Knowledge items measured objective knowledge including methods of transmissions and means of preventing/reducing risk for infection.
- Attitudes measured included self-efficacy, personal risk, friends' risk for becoming infected, and magnitude of HIV/AIDS epidemic.
- Self-reported high-risk behaviors included unprotected sex, sex with multiple partners and injecting drug use with needle sharing.

 Socio-demographics including age, race/ethnicity, gender, length of time incarcerated, and geographical location.

A panel of three national experts on AIDS and adolescence affirmed content validity (Barthlow, Horan, DiClemente, & Lanier, 1995). The questionnaire was pilot-tested with a group of 34 detained juveniles and was subsequently modified to reflect an elementary reading level. Several HIV/AIDS research studies reflect successful use of the questionnaire: Knowledge and concern about AIDS among incarcerated juvenile offenders (Lanier & McCarthy, 1989); AIDS awareness and the impact of AIDS education in juvenile corrections (Lanier & McCarthy, 1989); HIV knowledge and behaviors of incarcerated youth; a comparison of high and low risk locales (Lanier, DiClemente, & Horan, 1991); and correlates of condom use among incarcerated adolescents in a rural state (Barthlow, Horan, DiClemente, & Lanier, 1995).

Second, the University of Central Florida (UCF) AIDS/HIV Risk
Assessment Interview consisted of 37 open-ended questions that cover the
majority of issues measured by the AIDS/HIV Questionnaire, allowing for
elaboration and in-depth discussion (Appendix B).

# Data Collection Procedures

Approval for the study was obtained from the University of Florida
Institutional Review Board (Appendix C). All research participants were advised
that participation in the study was strictly voluntary and there would be no
penalty if they chose not to participate. Also, participants were informed that
they would not be awarded compensation of any kind and were given assurance

that they would have complete confidentiality. In order to assist in maintaining participants' privacy and confidentiality, participants were specifically asked not to identify themselves on the questionnaire and not to reveal their names during the subsequent interviews. Each research participant consented to participate in the study by signing the appropriate assent form (Appendix D) provided by the University of Florida. Parental/legal guardian consent was obtained for each of the Escambia County, Florida jail participants (Appendix E). Escambia County, Florida jail juveniles' participation in the study was solicited by, first securing verbal permission from the jail administration; Major White and Captain Comish; and the jail's Department of Forensics, Dr. S. K. Zoss, Coordinator of Adult Forensics Unit and J.J. Crater, Licensed Mental Health Counselor. Study participants were recruited by visiting each cell and providing each juvenile with information regarding the research study.

DISC Village participants were recruited as part of a Florida Department of Children and Families (Formerly Florida Department of Health and Rehabilitative Services) funded research project sponsored by the University of Central Florida, Orlando, Florida.

At the beginning of each jail visit and prior to talking to juveniles, the jail's adolescent mental health counselor provided a current roster of inmates. Those inmates agreeing to participate in the study signed the appropriate consent form. Parents/legal guardians of those inmates consenting to participate were first contacted by telephone or via a home visit and provided information regarding the research study. J.J. Crater, Licensed Mental Health Counselor, provided the

names, addresses, and telephone numbers parents/legal guardians of juveniles consenting to participate in the study. Those parents/legal guardians agreeing to have their child participate in the study were either hand delivered or mailed the appropriate consent form. In the event a parent/legal guardian was unwilling or unable to have the consent delivered, the consent form along with a return address stamped-envelope was mailed to them. Parents/legal guardians not having a telephone service were visited at home.

The UCF AIDS/HIV Questionnaire was administered to Escambia County jail participants over several days to groups of approximately six to eight male inmates in the group room located in the jail infirmary. The three female inmates were housed in the jail infirmary and were administered the questionnaire in their cell. All DISC Village male participants received the questionnaire on the same day, at the same time. DISC Village female participants received the survey at the same time on the same day as DISC Village male participants. The researcher provided reading assistance on a group and an individual basis as needed to participants demonstrating a low reading level.

Additionally, 50% of Escambia County, Florida jail participants and 13% randomly selected DISC Village participants (detention facility) received a 45-60 minute AIDS/HIV Risk Assessment Interview. All Interviews were conducted by the researcher among jail group participants and detention group participants on an individual basis and in a private setting.

The HIV/AIDS educational program was developed for juveniles incarcerated in the Escambia County, Florida jail. It was developed utilizing information obtained from the UCF AIDS/HIV Questionnaire (Appendix A) and the AIDS/HIV Risk Assessment Interview (Appendix B).

#### Analysis of Data

All data entry and analysis for the needs assessment component of this study were conducted using SPSS for Windows, Version 6.0. Double data entry involved taking each of the 45 surveys and visually comparing the responses to the questions with the entries in the data set. This procedure revealed no errant entries.

An additional data verification technique was employed during the data entry process. Any survey that appeared to be completed in a random manner, a systematically untruthful manner, or in a manner that suggested overt hostility toward the survey process as evidenced by hostile comments or sayings written on the survey were marked as being possibly invalid by the data entry personnel. There were no such surveys.

The conclusion based on this conservative procedure is that any error from data entry is extremely minimal and non-systematic in nature. Thus, the data set is presumed to be clean and valid, representing the subject's true response to the survey instrument.

To date, data analysis has been limited to analysis of frequency distributions, descriptive statistics, and Chi-square analysis. Chi-square is useful in determining if significant differences between levels of variables exist between the jail group and the detention center group, a group of 79 participants who were incarcerated in a different facility. Descriptive statistics were used to

address research objectives one through five. Information obtained from the University of Central Florida (UCF) AIDS/HIV Questionnaire and AIDS/HIV Risk Assessment Interview data were employed in meeting research objective five.

## CHAPTER 4 RESULTS

In this chapter, the results of the University of Central Florida (UCF)
AIDS/HIV Questionnaire and the University of Central Florida (UCF) AIDS/HIV
Risk Assessment Interview are presented. The UCF AIDS/HIV Questionnaire
was developed specifically to determine AIDS-related knowledge, attitudes and
behaviors of adolescents (Lanier, 1989). The University of Central Florida
(UCF) AIDS/HIV Risk Assessment Interview (Lanier, 1996) consisted of 37
open-ended questions that covered the majority of issues measured by the UCF
AIDS/HIV Questionnaire, allowing for elaboration and in-depth discussion.

Survey participants consisted of 45 juveniles (42 males and 3 females) incarcerated in the Escambia County, Florida jail and 79 juveniles (65 males, 13 females, one missing observation) detained in DISC Village detention facility. DISC Village detention center males were located at Greenville Hills Academy, Greenville, Florida and females were detained at the RAFT Program, Woodville, Florida. Survey participants in the jail were between the ages of 13 and 17 with a little over a half age 17. Ninety-three percent were male. Almost three-fourths were African -American, a fifth White, 2.3% Hispanic, and 4.5% Asian. Survey participants in the detention center were between the ages of 11 and 18. Almost three-fourths were between the ages of 13 and 16. Over four-fifths were male.

More than half were African-American, one-third White, 2.6% Hispanic, and 2.6% Asian.

Interview participants consisted of approximately 50% (N=22) of the Escambia County Jail participants and 30% (N=23) randomly selected detention center participants. Interview participants in the jail consisted of 22 males between the ages of 14 and 17 with an average age of 15.7. A little over four-fifths were African-American and a little less than a fifth were White. Interview participants in the detention center consisted of 19 males and four females between the ages of 11 and 17 with an average age of 14. Fifty-two percent were African-American and forty-eight were White.

This study had several objectives. For objectives one through four, responses from the juveniles in the adult correctional facility are compared with those of youth detained in a juvenile detention facility. The results will be described by study objectives. The two groups were significantly different on a total of four variables, one socio-demographic variable and three behavior variables. However, since there are so few differences, these could be Type I errors

### Socio-demographics

The first objective was to determine the socio-demographic characteristics that describe juveniles incarcerated in an adult facility who are at high risk. Five questions from the UCF AIDS/HIV Questionnaire assessed juveniles' socio-demographic including age, race/ethnicity, gender, location and length of time incarcerated. As Table 4-1 demonstrates, the demographic profiles of the two

populations are similar. The majority are male, of ethnic/racial minority status (African-American), and over half had been incarcerated over 60 days. The two groups were found to be significantly different on only one demographic variable, age (Table 4-2).

More than half of the Escambia County, Florida jail participants were age 17, while almost three-fourths of DISC Village participants were between the ages of 13 and 16. The jail did not contain any participants between the ages of 11 and 12.

The majority of jail group and detention group participants were male. African-Americans comprised almost three-fourths of the jail group participants and just over half of the detention group, Whites one-fifth of the jail group and one third of the detention center group, Hispanics 2.3% of the jail group and 2.6% of the detention center group, Asian 4.5% of jail group and 2.6% of detention center group, and other 2.3% jail group and 6.4% detention center group.

Regarding length of stay, 15.6% of the Escambia County jail juveniles had been incarcerated 1-30 days, 26.7% 31-60 days, 28.9% 61-90 and 29.9% had been detained over 91 days. Almost 21% of DISC Village detention center juveniles had been incarcerated 1-30 days, 19.5% 31-60 days, 16.9% 61-90 days, and 42.9% had been incarcerated over 91 days (Table 4-1).

# HIV/AIDS Risk Behaviors

The second objective was to identify high-risk behaviors related to HIV/AIDS reported by juveniles detained in these correctional facilities. Twentythree questions assessed juveniles' HIV risk behaviors and behavioral intentions (Table 4-3). HIV-related behavioral risk items included sexual activity, multiple sexual partners, same sex relationships, failure to use condoms, failure to ask sexual partners about their sexual history, sexual abuse, injecting drug use, non-injecting drug use, failure to take special precautions to prevent contracting HIV and sharing items that have the potential to be contaminated with HIV transmissible body fluids. Participants in both groups reported several high-risk behaviors. Almost all participants are sexually experienced, over half reported at least six lifetime sexual partners, two-fifths use condoms consistently, less than half ask their sexual partners about their sexual history, over half report that they would have sex with an attractive partner if no condom were available and over four-fifth have used marijuana.

The two groups were found to be significantly different on three behavior variables, sexual abuse (Table 4-5), number of sexual partners in the last three months (Table 4-6), and number of same sex relationships (Table 4-7).

Regarding high-risk behaviors among jall participants, overall, juveniles incarcerated in the Escambia County jail reported more sexual risk behaviors than their detention center counterparts. Almost 98% of jail group participants and 92.3% of the detention center group participants reported that they were sexually experienced. Over half (51.1%) of jail participants reported having had 10 or more lifetime sexual partners, compared to almost two-fifths of the detention center group. The two groups were found to be significantly different (p< 0.05) (See Table 4-6) in the number of sexual partners in the last three

months. In response to question #65, "how many sexual partners have you had in the last three months", half of jail participants compared to almost three-fourths of the detention group participants reported that they had not had any sex partners in the last three months. Regarding juveniles incarcerated in jail, a fifth reported that they had one partner in the last three months, over a fifth reported 2-5 partners, 6.8% reported 6-10 partners and none reported over 10 partners in the last three months. Among the detention group, 11.5% reported one partner, 7.7% reported 2-5 partners, 1.3% reported 6-10 partners and 6.4% reported over 10 partners in the last three months.

Although almost three-fourths of juveniles in both groups reported that they frequently take special precautions to prevent catching AIDS, specific responses indicate behaviors to the contrary. In response to the question (#32), "In the last 5 times you had sex, how many times did you use a condom", two-fifths of both groups reported that they used a condom each of the last five times they had sex. Over half of both groups reported that they would have sex with an attractive partner if no condom were available. More than a fourth of jail participants and over two-thirds of detention center participants reported that they would trust a sexual partner if they said they were free from disease.

Additionally, although almost all participants in both samples reported plans to use a condom if unsure of their partners' sexual history, only two-fifths of jail participant and two-thirds detention center participants reported that they frequently ask partners about their sexual history.

Regarding drug use, more than four-fifths of both groups reported that they had used marihuana.

Jail group participants reported several low-risk behaviors. With respect to same sex behavior, the two groups were significantly different (p< 0.05) (See Table 4-7) in reporting the number of same sex relationships. Jail participants were less likely than their detention counterparts to report being at risk. In response to the question (#66), "with how many partners have you had a same sex relationship", almost all jail group participants responded 'none", compared to close to three-fourths of detention group participants. A little over 2% of intervention group participants reported one same sex relationship, while 6.4% of the comparison group participants reported one same sex relationship, 14.1% reported 2-5, 2.6% reported 6-10, and 2.6% reported over 10 same sex relationship.

In regard to sexual abuse, the two groups were significantly different (p< 0.05) (See Table 4-4). A little over 4% of jail participants compared to 18.4% of detention center participants reported ever being sexually abused. Although not statistically significantly different, jail participants were less likely to report physical abuse than detention center participants were.

With respect to behavioral intention, approximately three-fourths of both group respondents reported that, in the future they will frequently demand the use of a condom for their own protection as well as for their partner's protection.

None of the jail juveniles and 6.5% of detention group juveniles responded yes to the question, "have you ever 'shot up' drugs. Almost all respondents in both

groups reported that in the future, they do not plan to inject drug or share a needle in order to body pierce.

Over half of jail participants respondents and almost three-fourths of detention center participants reported that they had been tested for HIV. No positive results were reported among either group.

# HIV/AIDS Knowledge

Objective three assessed the level of HIV/AIDS knowledge of juveniles detained in these correctional facilities. The HIV/AIDS knowledge portion of the questionnaire consisted of nineteen items that were answered on a yes, no, or don't know basis (Table 4-8). These items assessed juveniles' knowledge regarding modes of transmission, risk groups/behaviors, risk reduction and general knowledge. The majority of participants in both groups reported high levels of HIV/AIDS knowledge regarding modes of transmission, high-risk behaviors and HIV prevention. Survey results revealed no significant differences between the jail group and the detention center group on any of the knowledge variables.

Although less knowledgeable in some areas than in others, overall, these juveniles reported a high level of HIV/AIDS knowledge. Regarding transmission through casual contact, approximately three-fourths of both group respondents correctly reported that AIDS cannot be caught from sharing a glass of water with an infected person and that one cannot acquire AIDS by eating food prepared by a person who has AIDS. Just over three-fourths of jail group participants and two-thirds of detention group participants correctly reported that AIDS could not

be caught from a toilet seat. Four-fifths of the jail group and a little over two-thirds of the detention group knew that AIDS could not be caught if a person with AIDS sneezes on you. In response to the question "AIDS can be caught from sharing marijuana pipes or cigarettes", the majority of both groups responded correctly. The vast majority of the jail and detention group participants knew that AIDS is not transmissible through shaking hands. Almost 90% of both groups were aware that AIDS is not transmissible by kissing on the cheek.

Considering actual transmission knowledge, almost all jail group participants and three-fourths of detention group participants knew that sharing razor blades and tattoo needles are means of HIV transmission. All jail group respondents and almost all detention group respondents were aware that AIDS is transmissible through sharing drug needles.

Participants demonstrated that they were less knowledgeable in several areas relating to actual transmission of the virus. For example, one-third of jail group participants and less than one-fifth of detention group respondents were aware that AIDS could not be acquired through donating blood. A little less than two-fifths of both groups reported that AIDS could not be caught from heavy tongue kissing. In response to the statement, "AIDS can be caught if the hospital has to give you blood", approximately two-thirds of both groups responded correctly.

Relative to general knowledge, the vast majority of both group knew that a virus causes AIDS. The majority of juveniles were aware that the disease is not confined to certain segments of the population. For example, In response to the

question, "AIDS is harder to catch if you are young and healthy", approximately three-fourths of both groups responded correctly. In response the question, "All gay men (homosexuals) have AIDS", three-fourths of jail group participants and over half of detention group participants correctly responded "no."

Although not significantly different, jail group participants demonstrated a higher level of prevention knowledge than did detention group participants. For example, more than four-fifths of the jail group and two-thirds of the detention group were aware that using a condom would help reduce risk for acquiring the virus.

#### Attitudes Regarding HIV/AIDS

The fourth objective was to determine the attitudes related to HIV/AIDS of juveniles detained in these facilities. Twenty-six items examined juveniles' attitudes toward HIV/AIDS (Tables 4-9 and 4-10). Almost all participants in both groups were aware of the severity of the AIDS problem in the United States, most reported that they worry about contracting HIV, almost all were aware that it is possible to have AIDS and not know it and about a fourth believed themselves to be at high risk for contracting HIV. The two groups were not significantly different on any of the attitude variables.

The majority of both groups believed that AIDS is a big problem in America. Close to 14% of jail group participants and 22.1% of detention group respondents considered AIDS to be a fabricated problem by the government.

However, the reported perceived risk of infection for self and for friends was low. Approximately a fourth of both groups perceived themselves to be personally

vulnerable to becoming infected. About a quarter of jail group and forty percent of detention group respondents reported their friends to be at high risk for becoming infected.

Regarding self- and response-efficacy, about half of jail group participants and a third of comparison group participants agreed that individuals are responsible for protecting themselves against HIV infection. The vast majority believed that persons can take action to prevent this disease (Tables 4-10 and 4-11). In response to the statement, "there is a cure for AIDS but it is too expensive for most people, " about a fourth of both groups agreed.

In response to perceived norms of sexual behaviors among friends, a fifth of jail group participants and a third of detention group participants believed that their friends have had over 10 lifetime sexual partners. Approximately 90% of both group respondents believed that their friends had not had a homosexual relationship. Three-fourths of jail group participants and more than half of detention group participants would like to be tested for AIDS, while almost two-thirds of jail group participants and close to three-fourths of detention group participants would like their friends to be tested.

Regarding worry, only a small percentage of juveniles from both groups considered themselves to be at low risk for becoming HIV infected. Three-fourths of both groups reported that they worry a lot about catching AIDS.

Finally, more than half of the respondents from both groups reported that they worry about their friends catching AIDS.

Considering perceived knowledge, two-thirds of both groups reported that, compared to most people, they feel that they know a lot about AIDS. Jail group participants reported that the majority of their knowledge was learned from public school, while detention groups reported youth services as the source of the majority of their knowledge.

Overall, participants held few HIV/AIDS misconceptions. In response to the statement, "only homosexuals catch AIDS," 6.7% of jail group participants and 5.2% of detention group participants agreed. Almost 7% of jail group and 8.9% of detention participants believed that white people have less of a chance of catching AIDS.

# UCF AIDS/HIV Risk Assessment Interview Results

All 22 of the Escambia County, Florida jail sample confirmed that they were sexually active, compared to over four fifths of the detention group sample. More than two-fifths of jail participants and a little more than one-third of the detention group sample reported that they discuss their partners' sexual history with them. None of the jail group participants and only one detention group participant reported sexual intercourse with someone of the same sex. In response to the question, "Have you ever shared a needle for tattooing, drugs, body piercing, for any other reason," all jail participants reported no, while less than one-fifth of detention participants reported that they had shared a needle for body piercing. About two-thirds of both samples reported that they have been tested for HIV. No HIV positive results were reported.

In response to the question "How much do you know about HIV/AIDS?", over two-thirds of the jail sample responded "not much." Other responses included, "enough to keep from getting it", "enough to use a condom," "can die from it," "can get it from sharing needles," and "can it get from blood transfusion." The majority of the jail sample reported that they were aware of HIV modes of transmission and methods of prevention. A few reported, "I know enough to protect myself". In reply to the question, "Many juveniles have HIV. What could be done to keep this number from increasing?," the most frequent responses from the jail sample included, "use condoms," "don't know," "education," "don't sleep around," "abstinence," and "nothing." Eleven of 23 detention juveniles reported that protective sex/condom use is a means of preventing HIV transmission among juveniles. Four juveniles proposed sexual abstinence, two suggested education, and one recommended not using I.V. needles.

All participants in both samples reported that they believe "AIDS is a big problem in America". In response to the question, "Are you at risk for HIV?," almost a third of the jail group sample and more than half of the detention group sample responded "yes." More half of the jail sample and almost three-fourths of the detention sample reported that their friends are at risk for HIV. In response to the question, Who's at risk for HIV?" the most frequent response for both samples was "any/everybody." The vast majority of both samples believed that condoms should be made available in schools.

#### Summary of Survey and Interview Results

Survey and interview data results revealed very few differences between the jail group and the detention center group. The two groups were significantly different on one socio-demographic variable, age and three behavioral variables, sexual abuse, number of sexual partners in the last three months, and number of same sex relationships

Survey results revealed that, socio-demographically almost all survey and interview participants were male. The majority of survey and interview participants in the jail and survey participants in the detention center were African-American. Interview participants in the detention were almost equally divided between African-Americans and Whites. Survey and interview participants in the jail were slightly older than their detention center counterparts. Almost 29% of jail participants had been incarcerated over three months compared to almost 43% of detention center participants.

Almost all of these juveniles are sexually experienced and over half of the survey participants have had ten lifetime sexual partners. The majority do not use condoms consistently, and a vast majority had used marihuana. Jail group participants and detention group participants were significantly different on three behavior variables, sexual abuse, number of sexual partners in the last three months, and number of same sex partners.

Overall, participants demonstrated moderate to high levels of knowledge regarding prevention, mode transmission, high-risk behaviors and general knowledge. Additionally, participants were aware that the disease is not

confined to certain segments of the population. The two groups were not significantly different on any knowledge variables

Participants reported an awareness of the severity of the AIDS problem in the U.S. However, group participants reported attitudes that increase their risk for becoming infected with HIV. For example, the majority of the survey sample did not perceive themselves or their friends to be at high risk for contracting HIV. More than half of the interview participants in the detention center and almost a third of the jail group reported that they are at risk. Additionally, a large minority believed there is a cure for AIDS. The two groups were not significantly different on any attitude variables

Results from the UCF AIDS/HIV Questionnaire and the UCF Risk Assessment Interview were used to plan and develop the educational intervention HIV/AIDS Educational Program for Juveniles Incarcerated in a County Jail Based on the AIDS Risk Reduction Model (ARRM)

Program Overview and Theoretical Framework

Research suggests that the most successful HIV prevention programs are those programs that are theory- and skills-based, and include both cognitive and behavioral aspects (Allensworth & Symons, 1989; Longshore, 1990; Boyer & Kegeles, 1991; Fisher & Fisher, 1992; Jemmott, Jemmott, & Fong, 1992; DiClemente, 1993; National Commission on AIDS, 1994; and Jemmott, Jemmott, & Fong, 1998). Additionally, these comprehensive programs must be age-appropriate, sensitive to cultural values, provide access to services, and include adolescents' attitudes and customs, religious beliefs, and sex roles (Boyer, & Kegeles, 1991; DiClemente, 1993a; DiClemente, Brown, et al., 1993; Fisher & Fisher, 1992; Gillmore, Morrison, Richey, Balassone, Gutierrez, & Farris, 1997; Kooperman, et al, 1994; & National Commission on AIDS, 1994).

This 8-hour HIV educational program, based upon the AIDS Risk Reduction Model (ARRM) (Catania, et al., 1990) is a knowledge based, cognitive-behavioral-skills intervention. The ARRM is a psychosocial conceptual model designed to examine people's efforts to change sexual behavior in order to avoid contracting HIV through sexual transmission. According to the ARRM, in order to reduce their risk for contracting HIV, adolescents must first recognize and label their behavior as at-risk for contracting HIV (stage one), they must make a commitment to reduce high risk sexual contacts and increase low risk

behaviors (stage two), and they must seek and enact strategies to execute recommended risk reduction activities (stage three).

Variables hypothesized to influence stage one include knowledge of sexual activities associated with HIV transmission, the belief that one is personally susceptible to contracting HIV, and social influences. Factors hypothesized to influence stage two, commitment include perceived costs and benefits, self-efficacy, knowledge and perception of enjoyment and risk reduction, and social influences. Stage three, enactment, includes information-seeking, obtaining remedies, applying solutions and social influences. Verbal communication with sexual partners regarding sexual issues is a key component of the enactment stage.

The results of the survey data led to the development of the following HIV/AIDS educational program, designed specifically for juveniles incarcerated in an adult facility. It was developed utilizing information obtained from the results of a survey administered to this same population. It is theory-based (AIDS Risk Reduction Model) with emphasis on cognitive-behavioral skills. It incorporates those components determined by research to be characteristic of effective prevention programs such as, age appropriate, culturally sensitive and provides access to services.

As previously stated, survey results revealed that the majority of Escambia County, Florida jail participants were age 17 and African American, almost all are sexually experienced, most have a high number of life time sexual partners, do not use condoms consistently when participating in sexual activity.

harbor HIV/AIDS misconceptions, have a history of marihuana use, and do not consider themselves to be at high risk for contracting HIV. These characteristics were utilized in developing program goals and objectives.

#### Program Goals

The overall goals of this program are to: 1) decrease number of sexual partners with whom they engage in unsafe sexual practices; 2) increase participants' perceived susceptibility of their own risk for contracting HIV; 3) increase the consistent and correct use of latex condoms and other barrier methods during sexual intercourse; 4) eliminate or decrease frequency of drug use in situations that may lead to sexual activity; and 5) increase/reinforce HIV/AIDS knowledge

## Program Objectives

By the end of this educational intervention, participants will be able to: 1) identify and discuss HIV high-risk behaviors; 2) identify major modes of HIV transmission; 3) identify ways in which HIV is not transmitted; 4) personalize own risk for contracting HIV; 5) describe methods of HIV prevention; 6) describe and utilize appropriate communication/partner negotiation skills; 7) describe and utilize appropriate decision making/problem solving skills; 8) describe correct condom use; 9) identify where/how to obtain latex condoms; and 10) identify community resources, including drug treatment facilities, mental health facilities, local public health unit, HIV test sites, and self-help groups such as Alcoholics Anonymous (AA) Cocaine Anonymous (CA) and Narcotics Anonymous (NA).

The 8-hour program, designed to be presented in four 2-hour modules is similar in length to previous interventions that have been successful in reducing risk for HIV infection among high-risk groups.

This educational program addresses stage one of the ARRM, recognizing and labeling by providing adequate and correct information regarding HIV. including modes of transmission and high-risk behaviors. Additionally, each participant is provided the opportunity (anonymously) to assist in personalizing their own risk and recognizing if they are personally susceptible to contracting HIV. Stage two, commitment involves motivating individuals to change risk behavior. It includes deciding if the risky behaviors can be changed and if the benefits outweigh the costs (i.e. condoms decrease pleasure). Responseefficacy and self-efficacy are addressed through providing information on condom efficacy and the health utility and enjoyability of various sexual practices. If one knows that condoms reduce the risk of contracting HIV and that there are ways that they can be used during sexual activity to make sex fun. one may be more likely to use condoms. Participants' self- efficacy is increased if they are knowledgeable about where and how to obtain condoms and how to use them correctly. The cost/benefits factor is addressed through providing the opportunity for social/peer reinforcement and positive reinforcement for reporting a desire and plan to engage in HIV low-risk activities. Additionally, group discussions would be used as a means of assisting participants in realizing that benefits outweigh the barriers or negative consequences of the high-risk behavior. Questions such as. "who will have your girl/boyfriend" if you contract

and/or die from HIV disease would be asked. Although some research indicate that youth can be motivated by fear (Job, 1988; Rhodes, MacDonald, & Elder-Tarizy, 1990), the use of fear/scare tactics will be avoided based on evidence that they have the potential to be counterproductive field (Hein, 1993: Airhihenbuwa, DiClemente, Wingood, & Lowe, 1992; & Rotheram-Borus, et al., 1995). Regarding stage three, enactment, participants are provided appropriate information and the opportunity to develop behavioral skills through decision making activities, group discussions, and a culturally sensitive video that focuses on decision making and communication skills, including partner negotiation. Community resources such as the local county public health unit, HIV testing sites, self help groups and drug treatment programs are identified. In consideration of social influences, mainly reference group norms, participants who engage in or support low risk activities are encouraged to share their feelings, thoughts and experiences with the group.

A variety of methods are utilized including group discussion, role play, games, videos, question/answer session, HIV/AIDS risk assessment (completed anonymously) to assist with recognition and labeling of one's behaviors as high risk, and skill-based activities including decision making/problem solving and communication/partner negotiation. These methods have proven successful in similar HIV prevention programs, particularly programs targeting African-Americans, as well as other high-risk adolescents (Boyer, et al., 1997; Dixon, 1994; Jemmott, et al., 1998; Jemmott, et al., 1992; Kipke, et al., 1993; St. Lawrence, Brasfield, et al., 1995; & St. Lawrence, Jefferson, et. al., 1994).

Cognitive-behavioral skills, derived from the Social Learning Theory (Bandura, 1977) are essential to make healthy choices and to put choices into action.

Skills-building interventions have been shown to be effective in changing adolescents' HIV high-risk sexual behaviors (Boyer, et al., 1997; Jemmott, et al., 1998; Kipke, et al. 1993); Rotheram-Borus, et al, 1995; St. Lawrence, Brasfield et al., 1995; St. Lawrence, Jefferson, et al., 1995; St. Lawrence, Jefferson, et al., 1994; & Schinke, Botvin, Orlandi, Schilling, & Gordon, 1990). There were two key skills that were involved, decision making and partner negotiation.

Decision making, as defined by decision theorists is "the process of making choices among competing courses of action " (Beyth-Maron, Fischoff, & Jacobs Quadrel and Furby, 1991, p. 20). The "normative" theory of decision making, in principle, considers whether a proposed solution to a problem is sufficient to that particular problem. Additionally, it considers the goal of the decision-maker and whether fortune/misfortune has a role in what takes place with the decision-maker. Thus, the normative theory of decision making "is couched in terms of the processes that people follow in order to have the best chance of reaching their goal" (Beyth-Maron, et al., 1991, p. 21). According to most of these general models, a person faced with a decision should first identify relevant alternatives. Second, the person should identify possible consequences of each action. Third, the person should evaluate the likelihood of each consequence occurring for each action. Next, the person should determine the relative significance of each consequence. Finally, the person

facing a decision should integrate the information from each step to identify the most appealing course of action.

Diclemente (1993) states, "communication and negotiation skills that promote safer sexual interactions and the use of condoms could provide adolescents with a repertoire of responses that could be employed to avoid highrisk situations" (p. 163). Communication/partner negotiation skill development focuses on assertive behavior. This program utilized a widely used formula developed by Bower and Boser (1976) and referred to as DESC (Describe, Express, Specify, and Choose). The DESC formula involves the following:

Describing the other person's behavior or the situation objectively; Expressing your feelings about the other person's behavior or the situation that you just described; Specifying changes you would like to see made; and Choosing the consequence you are prepared to carry out. Decision- making and partner negotiation skills are incorporated in this education program. Both are addressed in video and through role-play.

Although engagement in same sex behavior was reported by a small percentage of juveniles in this study, the high-risk nature of this type of sexual behavior accompanied by the failure of many African-American communities to discuss this behavior, indicate a need for its inclusion in this educational intervention. According to Stevenson and Davis (1994), "Many African-Americans do not wish to discuss their sexuality with others for fear that they will be negatively perceived as promiscuous, dirty, and responsible for current sexual disease epidemics" (p. 42). Additionally, 33% of the total number of

AIDS cases among males between the ages of 13-19 are reported in the "men who have sex with men" CDC exposure category (CDC, 1996).

TABLE 4-1: Socio-demographic Characteristics

# Escambia County, Florida Jail

		Number	Group %
Age	11-12	0	0
	13-14	3	6.7
	15-16	18	40.0
	17-18	24	53.3
Gender	Male	42	93.3
	Female	3	6.7
Race/Ethnicity	White AfrAm. Hispanic Asian Other	9 31 1 2	20.5 70.5 2.3 4.5 2.2
Length of Stay	1-30 days	7	15.6
	31-60 days	12	26.7
	61-90 days	13	28.9
	> 91 days	13	28.9
DISC Village Detention Faci	ility		
Age	11-12	8	10.3
	13-14	25	32.1
	15-16	33	42.3
	17-18	12	15.4
Gender	Male	65	83.3
	Female	13	16.7
Race/Ethnicity	White	26	33.3
	Afr. Am.	43	55.1
	Hispanic	2	2.6
	Asian	2	2.6
	Other	5	6.4
Length of Stay	1-30 days	16	20.8
	31-60 days	15	19.5
	61-90 days	13	16.9
	> 91 days	33	42.9

Table 4-2 Significant Difference Between Jail Group and Detention Group

Demographic Variable: UCF AIDS/HIV Questionnaire, Question # 58, What is your age?

<u>Age</u>	Detention Group		Jail Group
13 - 14	35.7%		6.7%
15 - 16	47.1%		40.0%
17 – 18	17.1%		53.3%
Chi-square	<u>Value</u>	<u>D.F.</u>	Significance
Pearson	21.268	2	.000

N = 70 Detention Group N = 45 Jail Group

<sup>\*</sup>Significant at level 0.05

Table 4-3: UCF AIDS/HIV Questionnaire – Escambia County Jail Group

HIV/AIDS Risk Behavior Questions

	Frequently	Sometimes	Never
In the future, I will use a condom if unsure of my partners sexual history.	82.2%	15.6%	2.2%
I would have sex with an attractive partner if no condom was available.	13.3%	37.8%	45.9%
In the future I plan to inject drugs.	2.3%	0%	97.8%
I would trust a sex partner if she/ he said they are free from disease.	4.4%	24.4%	71.1%
I would have sex without a condom if I had a negative AIDS test.	6.8%	20.5%	72.7%
In the future, I will demand the use of a condom (rubber) for my own protection.	77.8%	20.0%	2.2%
In the future, I will demand the use of a condom (rubber) for my partner's protection.	73.3%	17.8%	8.9%
I take special precautions to prevent catching AIDS.	71.7%	24.4%	4.4%
I ask sex partners about their sexual history.	40.9%	43.2%	15.9%
I share I.V. drug needles.	0%	2.2%	97.8%
In the future I will share I.V. drug needles.	4.4%	0%	95.6%

Table	4-3:	Continued
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Table 4-3;	Continued		Yes	No Uns	sure/Don't Know
In order to I a needle.	oody pierce, I	would share	2.2%	93.3%	4.4%
I have had	a blood test fo	or AIDS.	51.1%	42.2%	6.7%
I have teste	d positive for	HIV.	0%	88.9%	11.1%
I have been	sexually abu	sed.	4.4%	95.6%	0%
I have been	physically at	oused	11.1%	84.4%	4.4%
Have you e	ver used mari	juana?	82.2%	17.8%	0%
Have you ever "shot up" drugs?		0%	100.0%	0%	
Have you ir 3 months?	jected drugs	in the last	0%	100.0%	0%
			any times did	you use a co	ndom?
0 11.1%	1 4.4%	2 6.7%	3 15.6%	4 22.2%	5 40.0%
With how m none 2.2%	any partners 1 6.7%	have you had 2-5 24.4%	sexual interce 6-10 15.6%	ourse? Over 10 51.1%	
How many s none 50.0%	sexual partner 1 20.5%	rs have you ha 2-5 22.7%	ad in the last 3 6-10 6.8%	3 months? Over 10 0%	
With how m None 97.7%	any partners 1 0%	have you had 2-5 0%	a same sex re 6-10 0%	elationship? Over 10 2.3%	

Table 4-4: UCF AIDS/HIV Questionnaire – DISC Village Detention Facility

HIV/AIDS Risk Behavior Questions

	Frequently	Sometimes	Never
In the future, I will use a condom if unsure of my partners sexual history.	72.2%	27.8%	0%
I would have sex with an attractive partner if no condom was available.	10.1%	44.3%	45.6%
In the future I plan to inject drugs.	5.1%	1.3%	93.7%
I would trust a sex partner if she/ he said they are free from disease.	5.1%	30.4%	64.6%
I would have sex without a condom if I had a negative AIDS test.	12.7%	29.1%	58.2%
In the future, I will demand the use of a condom (rubber) for my own protection.	74.7%	16.5%	8.9%
In the future, I will demand the use of a condom (rubber) for my partner's protection.	78.2%	12.8%	9.0%
I take special precautions to prevent catching AIDS.	70.9%	22.8%	6.3%
I ask sex partners about their sexual history.	34.2%	36.7%	29.1%
I share I.V. drug needles.	0%	0%	100.0%
In the future I will share I.V. drug needles.	0%	0%	100.0%

Table 4-4: Continued

			Yes	No Unsu	re/Don't Know
In order to b a needle.	ody pierce, I v	vould share	3.9%	92.2%	3.9%
I have had a	a blood test for	AIDS.	70.5%	26.9%	2.6%
I have tested	d positive for I	HIV.	5.2%	79.2%	15.6%
I have been	sexually abus	sed.	18.4%	78.9%	2.6%
I have been	physically abo	used	26.0%	70.0%	3.9%
Have you ev	er used marij	uana?	87.2%	12.8%	0%
Have you ever "shot up" drugs?		6.5%	93.5%	0%	
Have you in 3 months?	jected drugs ir	n the last	3.9%	96.1%	0%
In the last 5	times you had	d sex, how ma	ny times did y	ou use a con	
0 17.6%	1 5.4%	2 18.9%	3 10.8%	4 5.4%	5 41.9%
	any partners h	nave you had			
None	1	2-5	6-10	Over 10	
7.7%	7.7%	30.8%	15.4%	38.5%	
How many s	sexual partners	s have you ha	d in the last 3	months?	
None	1	2-5	6-10	Over 10	
73.1	11.5%	7.7%	1.3%	6.4%	
With how m	any partners h	nave you had	a same sex re	elationship?	
None	1	2-5	6-10	Over 10	
74.4%	6.4%	14.1%	2.6%	2.6%	

Table 4-5 Significant Difference Between Jail Group and Detention Group

HIV/AIDS Risk Behavior Variable: UCF AIDS/HIV Questionnaire, Question # 15 - I have been sexually abused.

	Detention Group		Jail Group
No	81.1%		95.6%
Yes	18.9%		4.4%
<u>Chi-square</u>	<u>Value</u> 5.038	<u>D.F.</u>	Significance
Pearson		1	.025*

N = 74 Detention Group N = 45 Jail Group

Table 4- 6 Significant Difference Between Jail Group and Detention Group

HIV/AIDS Risk Behavior Variable: UCF AIDS/HIV Questionnaire, Question # 65 - How many sexual partners have you had in the last 3 months?

	<u>Detention Group</u>		Jail Group
None	73.1%		50.0%
1	11.5%		20.5%
2 - 5	7.7%		22.7%
6 or More	7.7%		6.8%
<u>Chi-square</u>	<u>Value</u>	<u>D.F.</u>	Significance
Pearson	8.707	3	.033*

N = 78 Detention Group N = 44 Jail Group

<sup>\*</sup>Significant at level 0.05

<sup>\*</sup>Significant at level 0.05

Table 4-7 Significant Difference Between Jail Group and Detention Group

HIV/AIDS Risk Behavior Variable: UCF AIDS/HIV Questionnaire, Question # 66 - With how many partners have you had a same sex relationship?

	Detention Group		Jail Group
None	74.4%		97.7%
At least 1	25.6%		2.3%
<u>Chi-square</u>	<u>Value</u>	<u>D.F.</u>	Significance
Pearson	10.780	1	.001*

N = 78 Detention Group N = 44 Jail Group

<sup>\*</sup>Significant at level 0.05

Table 4-8: UCF AIDS/HIV Questionnaire HIV/AIDS Knowledge Questions

	% Correct		Significance
	<u>Jail</u>	Detention	Pearson
AIDS can be caught from sharing a glass of water with an infected person.	75.6%	73.1%	.95120
AIDS can be caught from toilet seats.	77.8%	66.7%	.33610
AIDS can be caught from kissing on the cheek.	88.9%	89.9%	.50371
AIDS can be caught from heavy (tongue) kissing.	37.8%	39.2%	.58488
AIDS can be caught from sharing marijuana pipes or cigarettes.	84.4%	70.5%	.11669
AIDS can be caught from sharing drug needles.	100%	97.4%	.27880
AIDS can be caught from donating blood.	33.3%	17.9%	.13481
AIDS can be caught from sharing tattoo needles.	95.6%	92.2%	.471
AIDS can be caught from sharing cigarettes.	88.9%	76.9%	.22697
AIDS can be caught if a person with AIDS sneezes on you.	80.0%	67.9%	.27892
AIDS can be caught if a hospital has to give you blood.	60.0%	66.7%	.46167
AIDS is harder to catch if you are young and healthy.	73.3%	75.6%	.64028
Using a condom (rubber) will help prevent catching AIDS.	84.4%	66.7%	.09245

Table 4-8: Continued

	% Correct		Significance
	Jail	Detention	Pearson
You can catch AIDS by shaking hands with a person who has AIDS.	88.9%	87.2%	.74416
AIDS can be caught from sharing razor blades.	90.9%	75.6%	.07497
If a restaurant cook has AIDS, you will catch AIDS if you eat food the			
cook prepared.	77.8%	71.8%	.41384
All gay men (homosexuals) have AIDS.	75.6%	54.4%	.06543
Babies can be born with AIDS.	97.9%	96.2%	.75144
AIDS is caused by a virus.	91.1%	87.3%	.77504

Significant at level 0.05

Table 4- 9: UCF AIDS/HIV Questionnaire HIV/AIDS Attitude Questions — Jail Group

	Agree	<u>Disagree</u>	Don't Know
My chances of catching AIDS are great.	22.3%	53.3%	24.4%
My friends have a high chance of catching AIDS.	26.6%	17.8%	55.6%
White people have less of a chance of catching AIDS.	6.6%	75.5%	17.8%
There is a cure for AIDS but it is too expensive for most people.	24.4%	44.5%	31.1%
If I caught AIDS, I would tell any sex partners.	54.5%	18.2%	27.3%
If I caught AIDS, I would not tell anyone.	22.2%	48.8%	28.9%
If I caught AIDS, I would tell close friends.	48.9%	28.8%	22.2%
If I caught AIDS, I would not have sex again.	44.4%	22.2%	33.3%
AIDS is a big problem in America.	95.6%	4.4%	0%
I worry a lot about catching AIDS.	71.1%	22.3%	6.7%
I worry a lot about my friends catching AIDS.	53.4%	24.4%	22.2%
Only homosexuals catch AIDS.	6.7%	86.7%	6.7%
If you catch AIDS, it's your own fault.	56.8%	43.2%	0%
There is nothing you can do to prevent catching AIDS.	9.3%	83.8%	7.0%

Table 4- 9: Continued

				Agre	<u>ee</u>	Disagree	<u>Don't</u> Know
	ade up proble to decrease activity.			13.79	%	72.8%	13.6%
You can ha	ve AIDS and i	not know it.		93.29	%	2.3%	4.5%
If you catch within ten ye	AIDS, you wi ears.	II die		22.79	%	40.9%	36.4%
	e for someone and infect oth	e to have AIDS ers.	5,	88.6%		6.8%	4.5%
Compared to most people I feel that I know a lot about AIDS.				65.9%		13.7%	20.5%
Did the AIDS training you got here influence your intentions?				79.1%		21.0%	0%
				Yes		<u>No</u>	Don't Know
I would like to be blood tested for AIDS.				13.39	6	75.6%	11.1%
I would like my friends to be blood tested for AIDS.			ed	6.8%		65.9%	27.3%
How many of your friends do you think have had a homosexual relationship None 1 2-5 6-10 Over 10 90.9% 0% 9.1% 0% 0%					ship?		
How many sex partners do you think most of None         1         2-5         Over           11.1%         2.2%         8.9%         20.0%				6	onds ha Don't 55.6%	Know	
Where did you learn the most about AIDS? relatives, friends books, magazines television, radio public school youth services			DS?		17.9% 10.3% 10.3% 43.6% 17.9%		

## Table 4-9: Continued

# Where have you heard the most talk about AIDS?

parents, guardians	29.3
friends	4.9
public school	31.7
youth services	12.2
television or radio	22.0

Table 4-10: UCF AIDS/HIV Questionnaire
HIV/AIDS Attitude Questions – Detention Group

	<u>Agree</u>	<u>Disagree</u>	Don't Know
My chances of catching AIDS are great.	29.1%	36.5%	34.2%
My friends have a high chance of catching AIDS.	40.5%.	15.2%	44.3%
White people have less of a chance of catching AIDS.	8.9%	62.9%	28.2%
There is a cure for AIDS but it is too expensive for most people.	27.9%	43.0%	29.1%
If I caught AIDS, I would tell any sex partners.	51.9%	26.9%	21.5%
If I caught AIDS, I would not tell anyone.	18.0%	60.3%	21.8%
If I caught AIDS, I would tell close friends.	41.8%	24.1%	34.2%
If I caught AIDS, I would not have sex again.	30.4%	35.5%	34.2%
AIDS is a big problem in America.	92.4%	3.8%	3.8%
I worry a lot about catching AIDS.	71.5%	24.7%	3.9%
I worry a lot about my friends catching AIDS.	59.8%	28.6%	11.7%
Only homosexuals catch AIDS.	7.8%	83.1%	9.1%
If you catch AIDS, it's your own fault.	37.7%	45.5%	16.9%
There is nothing you can do to prevent catching AIDS.	14.3%	72.7%	13.0%

Table 4-10: Continued

				Agre	<u>e</u>	<u>Disagree</u>	<u>Don't</u> <u>Know</u>
AIDS is a made up problem by the government to decrease drug use and sexual activity.				22.19	6	54.6%	23.4%
You can hav	e AIDS and n	ot know it.		85.7%	6	9.1%	5.2%
If you catch within ten ye	AIDS, you wil ears.	l die		27.6%		47.4%	25.0%
	for someone and infect other	to have AIDS ers.	8,	80.5%		7.8%	11.7%
Compared to	o most people about AIDS.	I feel that		66.3%		18.2%	15.6%
Did the AIDS training you got here influence your intentions?				68.4%		31.6%	
				Yes		No	<u>Don't</u> <u>Know</u>
I would like to be blood tested for AIDS.				56.4%	6	26.9%	16.7%
I would like my friends to be blood tested for AIDS.			ed	72.2% 12.7%		12.7%	15.2%
How many of your friends do you think have had a homosexual r           None         1         2-5         6-10         Over 10           89.5%         5.3%         2.6%         0%         2.6%					nship?		
How many sex partners do you think most of your friends have had?           None         1         2-5         Over 6         Don't Know           9.0%         2.6%         11.5%         34.6%         42.3%							
Where did you learn the most about AIDS? Relatives, friends Books, magazines Television, radio Public school Youth services			DS?		21.4% 12.9% 8.6% 27.1 30.0	%	

# Table 4-10: Continued

# Where have you heard the most talk about AIDS?

Parents, guardians	16.4%
Friends	16.4%
Public school	24.7%
Youth services	32.9%
Television or radio	9.6%

# CHAPTER 5 DISCUSSION: CONCLUSIONS AND IMPLICATIONS

The study was undertaken to assess the education needs of juveniles incarcerated in an adult facility and develop an appropriate educational intervention for these juveniles. The UCF AIDS/HIV Questionnaire and the UCF AIDS/HIV Assessment Interview assessed the knowledge, attitudes, and behaviors of juveniles incarcerated in the Escambia County, Florida jail. Responses from juveniles incarcerated in the adult facility were compared with those of youth detained in a juvenile detention facility to determine if their needs were comparable. Escambia County, Florida jail (survey) participants consisted of 45 adolescents detained in the juvenile section and the infirmary of the Escambia County jail. Detention group (survey) participants were comprised of 79 adolescents incarcerated in two facilities in Northwest Florida. The jail group participants and detention group participants were significantly different on four variables, age, sexual abuse, number of sexual partners in the last three months, and number of same sex relationship.

The results of Escambia County jail survey data led to the development of an HIV/AIDS educational program designed specifically for juveniles incarcerated in an adult facility. The educational intervention is based upon the AIDS Risk Reduction Model (ARRM) (Catania, Kegeles, & Coates, 1990) and emphasizes cognitive-behavioral skills.

This chapter discusses the results and implications of the results. It is divided into four sections, Socio-demographics, HIV Risk behaviors, knowledge and attitudes about HIV/AIDS, and HIV/AIDS prevention programs. There have been few studies of incarcerated youth conducted previously.

## Socio-demographics

Research studies reveal that youth incarcerated in detention facilities are predominantly male (more than 85%), of racial or ethnic minority (42% African-American), between the ages of 14 and 17 (average age 15.7) and are generally detained for an average of eight months (Council on Scientific Affairs, 1990).

Socio-demographic characteristics of Juveniles incarcerated in the Escambia County, Florida jail were comparable to incarcerated juveniles, nationally regarding ethnicity and gender. The majority (83.3%) of Escambia County, Florida jail participants were male. African-Americans comprised almost three-fourths of the jail sample. Escambia County, Florida jail participants were between the ages of 13 and 17. However, over half were age 17, somewhat older than the national average of 15.7 years. Over a fourth of the jail juveniles had been detained over 3 months compared to a national average of 8 months.

# HIV/AIDS Risk Behaviors

Incarcerated youth have been identified as a subgroup of adolescents who are at increased risk for infection due to a higher prevalence of HIV high-risk behaviors (Council on Scientific Affairs, 1990). Results of this study duplicated results of other studies. Morrison et al. (1994), in a study of 119 juveniles in a detention facility found these adolescents to be at high risk relative

to the general population. These youth had high rates of sexual activity, a high number of sexual partners and a low rate of condom use. For example, onethird of these juveniles had used condoms the last time they engaged in sexual intercourse with their primary or steady partner, while about half had used condoms with their casual partners. Additionally, in a study involving incarcerated adolescents and public high school students, 99% of detained vouth reported being sexually active and 73% reported two or more sexual partners during the past year (DiClemente, et al., 1990). Regarding drug use, a nationwide survey of detained juveniles revealed that 63% of respondents used drugs regularly (Council on Scientific Affairs, 1990). The vast majority (98%) of Escambia County, Florida jail participants were sexually experienced. Over half reported 10 lifetime sexual partners and two-fifths reported consistent condom use. Over four-fifths had used marihuana. Additionally, the majority of these youth did not perceive themselves or their friends to be at high risk for contracting HIV. Lanier and McCarthy (1989), in a study assessing HIV awareness of juveniles detained in a detention center had similar results. Over three fourths of these juveniles reported that they did not feel they were at high risk for HIV infection and almost as many believed the same about their friends' risk for becoming infected.

# Knowledge and Attitudes about HIV/AIDS

Research studies reveal that, although incarcerated adolescents tend to be less knowledgeable than the general adolescent population, they demonstrate high levels of AIDS knowledge (DiClemente, et al., 1991).

Similarly, Escambia County, Florida jail participants reported high levels of HIV/AIDS knowledge regarding modes of transmission, high-risk group/behaviors, and risk- reduction activities. Some studies show that incarcerated youth are in lower agreement with AIDS health guidelines, have lower perceived personal threat of acquiring AIDS, and have lower personal self-efficacy compared to youth who were not incarcerated (Nader, Wexler, Patterson, McKusick, & Coates, 1989). These results were duplicated in this study. A little over one-fifth of Escambia County, Florida jail participants perceived themselves to be at risk for HIV infection and about half agreed that individuals are responsible for preventing their infection with HIV.

# HIV Prevention Programs and Incarcerated Adolescents

The results of the UCFAIDS/HIV Questionnaire and the AIDS/HIV Risk
Assessment Interview were used to plan and develop an educational
intervention for juveniles incarcerated in the Escambia County, Florida jail. This
intervention is based on the AIDS Risk Reduction Model (ARRM) and is
designed to be presented in four 2-hour modules. It is skill-based and
incorporates cognitive and behavioral aspects. The overall goals of the program
are to: 1) decrease number of sexual partners with whom they engage in unsafe
sexual practices; 2) increase participants' perceived susceptibility of their own
risk for contracting HIV; 3) increase the consistent and correct use of latex
condoms and other barrier methods during sexual intercourse; 4) eliminate or
decrease frequency of drug use in situations that may lead to sexual activity;
and 5) increase/reinforce HIV/AIDS knowledge. By the end of this educational

intervention, participants will be able to:1) identify and discuss HIV high-risk behaviors; 2) identify major modes of HIV transmission; 3) identify ways in which HIV is not transmitted; 4) personalize own risk for contracting HIV; 5) describe methods of HIV prevention; 6) describe and utilize appropriate communication/partner negotiation skills; 7) describe and utilize appropriate decision making/problem solving skills; 8) describe correct condom use; 9) identify where/how to obtain latex condoms; and 10) identify community resources, including drug treatment facilities, mental health facilities, local public health unit, HIV test sites, and self-help groups such as Alcoholics Anonymous (AA) Cocaine Anonymous (CA) and Narcotics Anonymous (NA).

Research suggest that the most successful risk-reduction programs are those programs that are theory-based, include both cognitive and behavioral aspects, and are skilled-based (Allensworth & Symons, 1989; Longshore, 1990; Boyer & Kegeles, 1991; fisher & Fisher, 1992; Jemmott, Jemmott, & Fong, 1992; & Jemmott, Jemmott, & Fong, 1998). This education program is similar to other prevention programs that have proven efficacious in reducing adolescents' risk for contracting HIV in several ways. It is based upon the AIDS Risk Reduction Model (ARRM) and incorporates two key skills included in most successful prevention programs, decision-making and communication/partner negotiation. Additionally, this education intervention is sensitive to cultural values, taking into account the ethnicity of participants. A major difference in this educational program and other risk-reduction programs is that it was

developed utilizing information obtained from the results of a survey and interview administered to this same population.

## Implications and Conclusions

Survey results revealed that juveniles incarcerated in the Escambia
County, Florida jail and the DISC Village detention center are at high risk for
exposure to and infection with HIV, the primary causal factor of AIDS. One of
the main educational implications of these findings is that while adolescents are
knowledgeable about HIV, they are also engaging in high-risk behaviors.
These findings are similar to finding in other studies involving adolescent among
the general population (DiClemente, et al., 1986; DiClemente, et al., 1993) as
well as among incarcerated adolescents (Morrison, Baker, & Gillmore,1994;
Lanier, et al., 1991; DiClemente, et al., 1991; & Lanier, & McCarthy, 1989b).
Additionally, these juveniles do not perceive themselves to be at high risk for
infection. These results compare to the results of other studies among
incarcerated adolescents (Katz, et al., 1995; Nader, et al., 1989; & Lanier, &
McCarthy, 1989b).

A second implication of the findings of this study is the need for more HIV/AIDS research that evaluates the specific education needs of the targeted population. In order for HIV programs to be successful, they must address the particular high-risk behaviors of that particular population. This educational program focused on perceived susceptibility; communication skills, especially regarding partner's sexual history and negotiation regarding condom and

drug/alcohol use; reinforcement of transmission knowledge; self efficacy; correct condom use; and community resources.

A third implication is the need for school-based HIV prevention programs to target students in the early preadolescent years. Over forty percent of jail group participants reported that the majority of their HIV/AIDS education was learned from public school. Given the deficits they demonstrate, it is important that these juveniles who are at high risk for dropping out of school learn as much as possible and as early as feasible. Additionally, Abraham and Sheeran (1994) report that many heterosexuals become sexually active at age 16 or earlier. Also school-based HIV prevention programs need to be theory- and skills-based with cognitive and behavioral aspect. Results of this study revealed that, although these juveniles reported high levels of HIV/AIDS knowledge, they were at high-risk for becoming exposed to and infected with HIV and the majority did not perceive themselves to be at high risk for HIV infection.

As of 1989, approximately 94,000 10-17 year olds were detained in juvenile facilities and during 1990 and estimated 6,000 juveniles were incarcerated in local jails or in State or Federal Prisons aspects (DiClemente, Lanier, Horan, and Lodico, 1991). Incarcerated juveniles are primarily male and of ethnic or racial minority. Research suggests that the most successful HIV prevention programs are those programs that are theory- and skills-based, include both cognitive and behavioral aspects and are sensitive to cultural values (Allensworth & Symons, 1989; Longshore, 1990; Boyer & Kegeles, 1991; Fisher & Fisher, 1992; Jemmott, Jemmott, & Fong, 1992; DiClemente, 1993;

National Commission on AIDS, 1994; and Jemmott, Jemmott, & Fong, 1998). Thus, a conclusion is the critical and urgent need to develop, implement and evaluate appropriate educational interventions for a growing number of incarcerated youth.

Second, this study was an exploratory study of youths in two settings, the Escambia county jail, an adult facility and DISC Village detention facility. Survey and interview data results revealed that the two groups are very similar. Therefore, while the educational intervention was developed for juveniles incarcerated in the Escambia jail, with minor modifications regarding the approach and not content, it is believed to be applicable to juveniles incarcerated in the detention facility. This study represents a major contribution to the literature in two ways. First, there are few studies that have been conducted previously that identify the needs of either population, and second, only a few, if any, programs have been developed for these youths based on their needs

In conclusion, health educators and other health care professionals involved with HIV prevention among high-risk adolescents generally acknowledge that knowledge alone does not translate into positive behavior change. Prevention programs must provide adequate and correct information. In addition, they must also provide the opportunity and resources for adolescents to develop the behavioral skills required to decrease their participation in high-risk behaviors and increase participation in risk-reduction activities.

#### Recommendations for Future Research

Survey findings reveal a group of adolescents at high risk for exposure to and infection with HIV, the primary causal factor of AIDS. Sociodemographically, Escambia County, Florida jail juveniles are majority male (93.3%), over half are age 17, almost three-fourths are African-American and more than a fourth had been detained over three months. Juveniles in the Escambia County, Florida iail were statistically significantly different from inveniles detained in DISC Village detention facility on one socio-demographic variable, age. Over half of the Juveniles detained in jail were age 17 while almost three-fourth of detention center juveniles were between the ages of 13 and 16. When comparing Escambia County, Florida jail juveniles to incarcerated juveniles on a national level, the two populations appear to be somewhat comparable. According to the Council on Scientific Affairs (1990), youth incarcerated in detention facilities are predominantly male (more than 85%), and of racial or ethnic minority (45% African-American). They appear to be clinically different on two variables, age and length of incarceration. Juveniles detained in detention centers have an average age of 15.7. The average length of incarceration is 12 days for short-term facilities and eight months for long-term facilities.

Escambia County, Florida jail juveniles reported a number of high-risk behaviors. Almost all are sexually experienced, over half have had 10 lifetime sexual partners, 40% use condoms consistently, and 82% have used marihuana. Although these juveniles reported moderate to high levels of HIV/AIDS

knowledge, only 23.3% perceived themselves to be a high risk for becoming infecting with HIV. Juveniles in the Escambia County, Florida jail were comparable to juveniles detained in DISC Village detention facility on the majority of behavior, knowledge and attitude variables. However, they were statistically significantly different on three important behavior variables, sexual abuse, number of sexual partners in the last three months and the number of same sex partners.

These study findings indicate a need for future HIV/AIDS research to accurately and effectively assess the education needs of juveniles incarcerated in juveniles and adult facilities, plan and develop appropriate HIV/AIDS educational programs for incarcerated adolescents utilizing survey data results, implement HIV/AIDS educational programs in detention and jail settings, and evaluate the effectiveness of these educational programs.

Instruments must effectively assess juveniles' education needs, including alcohol use, due to the association of alcohol use and lowered inhibitions and impaired judgement. Recommended changes in the UCF HIV/AIDS

Questionnaire include assessment of juveniles' use of alcohol and other mindaltering drugs; juveniles' living conditions regarding homeless or runaway status prior to incarceration; and, juveniles' participation in high-risk behaviors as related to length of time incarcerated. Additionally, the terms "HIV" and "AIDS" need to be used more accurately and appropriately to adequately reflect juveniles' actual HIV/AIDS knowledge. For example, the term "AIDS" in question #20, "AIDS can be caught from toilet seats?" should be replaced with "HIV."

It is important to note that incarcerated adolescents who participate in HIV/AIDS educational programs t have little, if any an opportunity to practice risk-reduction recommendations. Therefore, follow-up sessions must be provided to these adolescents upon their release.

In order for HIV/AIDS educational programs to be successfully implemented in jails and other correctional settings, it is important to have the approval of and cooperation from the appropriate authorities (Dolan, Wodak, & Penny, 1995; & Stevens, 1993). Future research needs to address policies and procedures regarding implementation of jail-based educational programs. A number of major intervention issues are encountered in attempting to implement a similar educational program in a county jail and detention center. First, obtaining parents/legal guardians' consent can be difficult and time consuming due to the lack telephone service, incorrect addresses, and fear and skepticism regarding the educational program.

Second, gaining access to inmates and having a convenient time and an appropriate setting to conduct HIV/AIDS education can prove challenging.

Security for the community, jail personnel as well as for other inmates is a primary concern of jail personnel. Inmates are not provided the freedom to move about at will. Inmates' movement from one location to another requires the direct supervision of jail personnel. The availability of rooms in which educational program can be conducted is limited. Thus, scheduling an educational program at the most effective time or place in jail is not easily facilitated. Additionally, due to security concerns as well as the lack of large

available rooms in the jail, educational programs are restricted to serving a small number of inmates at one time. Juveniles in long-term detention centers are not subject to these limitations. The availability of spacious rooms and easy access to juveniles in long-term detention centers allows for HIV/AIDS educational programs to be provided to large numbers of juveniles at one time.

Third, the content of the educational intervention is of concern to jail and detention center personnel. For example, condoms and hypodermic needles are contraband. Therefore, demonstrations regarding correct condom use and correct cleaning of drug injecting equipment are not permitted. Additionally correctional personnel may desire to review and approve all educational materials, including videos.

Finally, there is a need for further research on juveniles in adult and detention setting for youth in other parts of the country to determine whether there are differences base on geographical location, state and county laws and local correctional facility policies.

#### APPENDIX A

#### LICE AIDS/HIV QUESTIONNAIRE

You have been selected to participate in a study of AIDS and HIV. Your thoughts concerning AIDS and how it is spread are important to us. We are trying to slow the spread of AIDS among young people. You are free to withdraw from this study at any time. There are no harmful effects and in no way can your responses hurt you. We strongly encourage you to take 15 minutes and fill out this questionnaire. By completing this questionnaire you voluntarily indicate your willingness to participate in the study. NO ONE WILL KNOW WHO YOU ARE OR HOW YOU ANSWERED. ALL SUBJECTS HAVE COMPLETE ANONYMITY AND CONFIDENTIALITY. Read each question, and after you decide which answer is best, fill in the correct space with a No. 2 pencil.

#### A. BEHAVIOR

These	e questions deal with precautions	you ma	ay take as a result of AIDS.
1.	In the future, I willuse a condom if unsure of my partners sexual history.	4.	I wouldtrust a sex partner if she/he said they are free from disease.
	<ul><li>a. Frequently</li><li>b. Sometimes</li><li>c. Never</li></ul>		<ul><li>a. Frequently</li><li>b. Sometimes</li><li>c. Never</li></ul>
2.	I wouldhave sex with an attractive partner if no condom was available.	5.	I wouldhave sex without a condom if I had a negative AIDS test.
	a. Frequently     b. Sometimes     c. Never		<ul><li>a. Frequently</li><li>b. Sometimes</li><li>c. Never</li></ul>
3.	In the future I plan to inject drugs.	6.	In the future, I will demand the use of a condom (rubber) for my protection.
	a. Frequently b. Sometimes		a Frequently

b. Sometimes c. Never

c Never

7.	In the future, I will demand the use of a condom (rubber) for my partner's protection.  a. Frequently b. Sometimes c. Never	13.	I have had a blood test for AIDS.  a. Yes b. No c. Don't know
8.	I take special precautions to prevent catching AIDS.  a. Frequently b. Sometimes c. Never	14. 15.	I have tested positive for HIV.  a. Yes b. No c. Don't know
9.	I ask sex partners about their sexual history.  a. Frequently b. Sometimes c. Never	16.	I have been sexually abused.  a. Yes b. No c. Unsure I have been physically abused.
10.	I share I.V. drug needles.  a. Frequently b. Sometimes c. Never	17.	a. Yes b. No c. Unsure In the future I willshare
11.	I would like to be blood tested for AIDS.  a. Yes b. No c. Don't Know	18.	I.V. needles.  a. Frequently b. Sometimes c. Never  In order to body pierce, I would Share a needle
12.	I would like my friends to be blood tested for AIDS.  a. Yes b. No c. Don't know		a. Yes b. No c. Unsure

#### B. KNOWLEDGE

These questions ask you how you think people with catch AIDS.

19 AIDS can be caught from 24 AIDS can be caught from sharing a glass of water of sharing drug needles. water wit h an infected person a Yes a. Yes h No h No c. Don't' know c. Don't know ADIS can be caught from 25 20. AIDS can be caught from donating blood. toilet seats a Yes a Yes h No h No c Don't know c. Don't know AIDS can be caught from 26. 21. AIDS can be caught from sharing tattoo needles. kissing on the cheek. a. Yes a Yes h No b. No c. Don't know c. Don't know 27. ADIS can be caught from 22. AIDS can be caught from sharing cigarettes. heavy (tongue) kissing. a. Yes a Yes h No b. No c. Don't know c. Don't know 28. AIDS can be caught if a 23. AIDS can be caught from person who has AIDS sharing marijuana pipes sneezes on you. or cigarettes. a Yes a. Yes h No

c. Don't know

b. No

c. Don't know

29.	AIDS can be caught if a hospital has to give you blood.  a. Yes	35.	If a restaurant cook has AIDS, you will catch AIDS if you eat food the cook prepared.
	b. No d. Don't know		<ul><li>a. Yes</li><li>b. No</li><li>c. Don't know</li></ul>
30.	AIDS is harder to catch if you are young and healthy	36.	All gay men (homosexuals) have AIDS.
	a. Yes b. No c. Don't know		a. Yes b. No c. Don't know
31.	Using a condom (rubber) will help prevent catching AIDS.	37.	Babies can be born with AIDS.
	<ul><li>a. Yes</li><li>b. No</li><li>c. Don't know</li></ul>		a. Yes b. No c. Don't know
32.	In the last 5 times you had sex, how many times did you use a condom?	38.	AIDS is caused by a virus.  a. Yes b. No
	a. 0 b. 1		c. Don't know
			e questions ask you how you feel AIDS.
	f. 5	39.	My chances of catching AIDS are great.
33.	You can catch AIDS by shaking hands with a person who has AID a. Yes b. No	OS.	a. Strongly agree     b. Agree     c. Disagree     d. Strongly disagree
	c. Don't know		e. Don't know
34.	AIDS can be caught from sharing razor blades.		

a. Yesb. Noc. Don't know

- My friends have a high chance of catching AIDS.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- 41. White people have less of a chance of catching AIDS.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- There is a cure for AIDS but it is too expensive for most people.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e Don't know
- 43. If I caught AIDS, I would tell any sex partners.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e Don't know

- If I caught AIDS, I would not tell anyone.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
    - d. Strongly disagree
  - e Don't know
- If I caught AIDS, I would tell close friends.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
  - e Don't know
- If I caught AIDS, I would not have sex again.
  - a. Strongly agree
    - b. Agree
    - c. Disagree
    - d. Strongly disagree
    - e. Don't know
- AIDS is a big problem in America.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know

- I worry a lot about catching AIDS.
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- I worry a lot about my friends catching AIDS.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- 50. Only homosexuals catch AIDS.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- 51. If you catch AIDS, it's your own fault
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- There is nothing you can Do to prevent catching AIDS.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know

- 53. AIDS is a made up problem by the government to decrease sexual activity and drug use.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly agree
  - e. Don't know
- You can have AIDS and not know it.
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
  - e. Don't know
- If you catch AIDS, you will die within ten years.
  - a. Strongly agree
    - b. Agree
    - c. Disagree
    - d. Strongly disagree
    - e. Don't know
- 56. It is possible for someone to have AIDS, not know it and infect others
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly agree
  - e. Don't know

57.	Compared to most people I feel that I know a lot about AIDS.  a. Strongly agree	63.	Have you injected drugs in the last 3 months?  a. Yes b. No	
	<ul><li>b. Agree</li><li>c. Disagree</li><li>d. Strongly disagree</li><li>e. Don't know</li></ul>	64.	With how many partner have you had sexual intercourse?	
for yours who y	ourpose of this last section is ou to tell us something about self. No one will ever know you are; all replies are ymous.		a. None b. 1 c. 2-5 d. 6-10 e. Over 10	
58.	What is your age?  a. 11-12 b. 13-14 c. 15-16 d. 17-18	65.	How many sexual partners have you had in the last 3 months?  a. None b. 1	
59.	What is your gender?		c. 2-5 d. 6-10 e. Over 10	
60.	b. Female What is your race?	66.	With how many partners have you had a same sex relationship?	
	White     African American     Hispanic     Oriental     Other		a. None b. 1 c. 2-5 d. 6-10 e. Over 10	
61.	Have you ever used marijuana?	67.	How many of your friends do you think have had a	
	a. Yes b. No		homosexual relationship?  a. None	
62.	Have you ever "shot up" drugs? a. Yes b. No		a. Note b. 1 c. 2-5 d. 6-10 e. Over 10	

- 68. How many sex partners do you think most of your friends have had?
  - a. None
  - b. 1
  - c 2-5
  - d. Over 6
  - e. Don't know
- 69. Where did you learn the most about AIDS?
  - a. Relatives, friends
  - b. Books, magazines, or newspapers
  - c. Television, radio
  - d. Public school
  - e Youth Services
- 70. Did the AIDS training you got here influence your intentions?
  - a. Strongly agree
  - b. Agree
  - c. Disagree
  - d. Strongly disagree
- 71. Where have you heard the most talk about AIDS?
  - a. Parents, guardians
  - b. Friends
  - c. Public school
  - d. Youth Services
  - e. Television or radio
- 72. Where are you located?
  - a. Orlando
  - b. Tallahassee

- 73. How long have you been here?
  - a. 1-30 days
  - b. 31-60 days
  - c. 61-90 days
  - d. over 91 days

# APPENDIX B

# AIDS/HIV RISK ASSESSMENT INTERVIEW

Interviewer Name Date Location
What are your future plans (school, work, party, etc.)? (List in order of importance).
How much formal education have you had?
What type of educational ambitions do you have? (e.g., get a GED, HS Diploma, BS, MS or Ph.D.).
What type of work ambitions do you have? (e.g., to work construction, become a doctor, etc).
How long have you been in custody?
Are you satisfied with how you are treated?
What is the most important thing you have learned
What offenses were you charged with?
What type of pressure or stresses have you faced while incarcerated? (Specific examples)

How do you handle potential violent situations? Give specific examples.

Are there strong clique groups while you are detained?

Describe them.

Which clique group do you best fit with?

How much do you know about HIV/AIDS?

Where did you learn the most about HIV/AIDS? (List in order)

Many juveniles have HIV. What could be done to keep this number from increasing?

Have you had an HIV test?

If yes, what was the result?

If no, would you like to be tested

Should people in prison be tested for HIV?

Why or why not?

Have you ever shared needles:		
for tattooing?		
drugs?		
body piercing?		
for any other reason?		
Would you ever share needles? Why or Why not?		
Who is at-risk for HIV?		
Are you at-risk for HIV?		
Are your friends?		
What would you do if you had AIDS?		
These next questions are somewhat personal, remember that no one will know how you answered.		
How many sexual partners have you had?		
Do you discuss your partners' sexual history with them?		
For sex, would you prefer a male partner of a female?		

Would you ever have sex with someone of the same gender?

Why or why not?

Have you ever engaged in deviant sex acts? (ex. use or work as prostitute, multiple partners, etc.). Give examples.

In your group (cottage, dorm), how many juveniles would you say have had alternative sexual preferences? (Bisexual or lesbian, give %%%%),

In other groups you know of?

Should condoms be available in:

Prison?

School?

Is it hard to get condoms (when you are not in custody)?

Why or why not?

If you could do things over, what would you do different?

Why or why not?

How big of a problem do you think AIDS is?

Is there a cure?

What should be done about the AIDS problem in America?
Which topic that we discussed caused you the most discomfort?
Why?
Are there any other issues or problems that we have not discussed?
Thank you for your help. Your information will help us a lot
COMPLETE AFTER INTERVIEW.
Interviewer impressions (openness of subject, degree of discomfort, etc.)

Description of subject. Approximate age, ethnicity, gender, soma-type, etc.

# APPENDIX C

# INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



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114 Psychology Bldg. PO Box 112250 Gainesville, FL 32611-2250 Phone: (904) 392-0433 Fax: (904) 392-0433

February 15, 1996

TO:

Ms. Sadie B. Sanders 117 FLG / PO Box 118210

FROM:

C. Michael Levy, Chair, University of Florida Institutional

Review Board

SUBJECT:

Approval of Project #96.057

Development of an educational intervention regarding HIV/AIDS for

incarcerated adolescents detained in a county jail

I am pleased to advise you that at today's convened meeting of the University of Florida Institutional Review Board this project was approved. The Board concluded that participants will not be placed at risk in this research. Although it is not essential that you obtain signed, witnessed parental informed consent for participants incarcerated at Disc Village, Tallahassee, Florida, it is essential that you obtain legally effective informed consent from each participant's parent or legal guardian for participants detained in the Escambia County jail. When it is feasible, you should obtain signatures from both parents. Enclosed is the dated, IKB-approved informed consent to be used when recruiting participants for this research.

If you wish to make any changes in this protocol, you must disclose your plans before you implement them so that the Board can assess their impact on your project. In addition, you must report to the Board any unexpected complications arising from the project which affect your participants.

Approval of this project runs for a period of one year from the date of this meeting, the maximum duration permitted by the Federal Office for Protection Research Risks. If this project will not be completed by February 15, 1997, please contact this office at least six weeks prior to that time so that we may advise you how to apply for a renewal.

By a copy of this memorandum, your Chair is reminded of the importance of being fully informed about the status of all projects involving human participants in your department, and for reviewing these projects as often as necessary to insure that each project is being conducted in the manner approved by this memorandum.

#### CML/h2

cc: Vice President for Research College Dean R. M. Pigg

Alta Douglas Dr. Barbara A. Rienzo

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HRS

#### APPENDIX D

#### Assent Form

Researchers from the University of Florida are doing a study to learn what young people think about AIDS/HIV. The study is being paid for by the principal researcher. Your thoughts about AIDS, how it is spread, and how t protect vourself are important to us. We would like to ask you to help us with the study. We will ask you to complete a short survey which takes approximately 20 minutes. You will also be asked some questions that will require about 45-60 minutes of your time. Several weeks after you complete the survey and answer the questions, you will be asked to participate in an HIV/AIDS educational program designed to assist you in reducing your risk for becoming exposed and infected with HIV. The educational program will take approximately 10 hours to complete. Your participation is voluntary and you can withdraw anytime you like. You do not have to answer any questions you do not wish to answer nor participate in any activity you do not wish to participate in. You will have complete anonymity and confidentiality. NO ONE WILL KNOW WHO YOU ARE OR HOW YOU ANSWERED. To maintain your privacy you will be asked to not give nor write your name (other than on this Assent Form). Nothing to do with the study can hurt you, your health or your well being. What we learn may help you since the HIV/AIDS educational program may help slow the spread of HIV and AIDS. You will not be compensated in any way. If you have any questions or want to learn more about the study you can call or write Ms. Sadie B. Sanders

at the University of Florida, Department of Hei- FLG, PO Box 11822210, Gainesville, FL 326 can also contact Dr. S. K. Zoss or Ms. J. J. Cr. (904) 436-9693 if you have any questions or pabout research participants' rights may be direnstitutional Review Board office, Box 112250, 352) 33920433.	11-8210; ph. (352) 392-0583. You ater at the Escambia County jail, problems. Questions or concerns acted to the University of Florida	
have read the procedure described above. I voluntarily agree to participate in he study and I have received a copy of this description.		
Participant's Name	Date	

#### APPENDIX E

#### Consent Form

Researchers from the University of Florida are doing a study to learn what young people think about AIDS/HIV. The study is being paid for by the principal researcher. Your child's thoughts about AIDS, how it is spread, and how she/he can protect him/herself are important to us. We would like to ask your child to help us with the study. We will ask your child to complete a short survey which takes approximately 20 minutes. He/she will also be asked some questions that will require about 45-60 minutes of his/her time. Several weeks after your child completes the survey and answers the questions, he/she will be asked to participate in an HIV/AIDS educational program designed to assist him/her in reducing his/her risk for becoming exposed to and infected with HIV. The educational program will take approximately 10 hours to complete. Your child does not have to answer any questions he/she does not wish to answer nor participate in any activity he/she does not wish to participate in. Your child will have complete anonymity and confidentiality. NO ONE WILL KNOW WHO HE/SHE IS OR HOW HE/SHE ANSWERED. To maintain your child's privacy, he/she will be asked to not give nor write his/her name (other than on the Assent Form). Nothing to do with the study can hurt your child, your child's health, or your child's well-being. What we learn may help your child since the HIV/AIDS educational program may help slow the spread of HIV and AIDS. Your child will not be compensated in any way. If you or your child have any questions or want to learn more about the study you can call or write Ms. Sadie B. Sanders at the University of Florida, Department of Health Science Education, Room 5 FLG, PO Box 118210, Gainesville, FL 32611-8210, (352) 392-0583. You can also contact Dr. S. K. Zose or Me. 1. I. Crotor at the Ecoembia County init (COA) 436

9693 if you have any questions or problems. Questions or concerns about research participants' rights may be directed to the University of Florida institutional Review Board office, Box 112250, Gainesville, FL 32611-2250; ph (352) 2392-0433			
	ed above. I voluntarily agree to have my child received a copy of this description.		
Parent/Legal Guardian's Name	Date		
Participant's Name			

#### APPENDIX F

HIV/AIDS Educational Program for Juveniles Incarcerated in a county jail Based on the AIDS Risk Reduction Model (ARRM)

Each educational program session is two hours in length. The first session covers basic HIV/AIDS information including definitions of HIV and AIDS, transmission of the virus and HIV high risk behaviors, and videos, "Don't Forget Sherrie" and "Letter From Brian". The second session includes HIV prevention and a game, HIV Basketball, that focuses on providing accurate HIV information, and an opportunity for participants to personalize their own risk (anonymously). The third session focuses on decision making/problem solving and communication/partner negotiation skills and a video. The fourth and final session addresses correct condom use, HIV antibody testing, community resources, and participants' reactions to the educational intervention.

The first session begins with an introduction to and explanation of the purpose and content of the prevention program. Basic ground rules, emphasizing the responsibility of the facilitator and each participant to maintain confidentia0lity and respect the rights, feelings, and ideas of each other are addressed. Participants are asked for any additional ground rules. They are encouraged to speak one at a time and discouraged from interrupting when the facilitator or another participant is speaking. It is emphasized that participation in any activities and/or discussions is strictly voluntary and will be encouraged but not forced. The facilitator will observe participants closely during and after each session for signs of discomfort or anxiety. Participants are informed of the

availability of an information box during each session for anonymous questions, comments, and suggestions.

Sessions two, three and four each begin with a review of the previous session. Each session ends with a review of the day's session and a preview of the session to follow.

# Program Goals:

The overall goals of this program are to:

- 1. Decrease number of sexual partners.
- Decrease the frequency of sexual intercourse with partners of unknown HIV serostatus.
- Increase the consistent and correct use of condoms and other barrier methods during sexual intercourse.
- Eliminate or decrease frequency of drug use in situations that may lead to engagement in sexual activity.

# Program Objectives:

By the end of this educational intervention, participants will be able to:

- 1. Identify and discuss HIV high-risk behaviors.
- 2. Identify major modes of HIV transmission.
- 3. Identify ways in which HIV is not transmitted.
- Personalize own risk for contracting HIV.
- Describe methods of HIV prevention.
- Describe and utilize appropriate partner negotiation skills.
- Describe and utilize appropriate communication, problem solving and decision making skills,

- Describe correct condom use
- 9. Identify where/how to obtain condoms
- Identify community resources, including drug treatment facilities, mental health facilities, local public health department, HIV testing sites, self-help groups including Alcohol Anonymous (AA), and Narcotics Anonymous (NA),

### Methods:

Group discussion/lecture

Game (HIV Basketball)

Videos ("Don't Forget Sherrie", "Letter From Brian", "Are You With Me")

Question/Answer Sessions

HIV Risk Assessment (completed anonymously), to assist with recognition and labeling of one's behaviors as high-risk

Skilled-based activities

# SESSION ONE (two hours)

#### Objectives

By the end of the session, participants will be able to:

- Define HIV and AIDS.
- Identify and discuss three HIV high-risk behaviors.
- 3. Identify behaviors by which HIV is not transmitted.
- Identify four body fluids through which HIV is transmitted.

#### Session One Contents

- Definition HIV & AIDS
- 2. History/origin of HIV/AIDS

- 3. Transmission of HIV
- 4. The Disease Spectrum
- 4. Cumulative Reported AIDS Cases and Estimated HIV Cases
- 5. Video "Don't Forget Sherrie"

# Materials and Resources Needed

- 1. Flip chart, markers for writing on chart and keeping game score
- 2. Question/comment box
- 3. Pencils and note paper
- 4. VCR Player

# SESSION TWO (two hours)

# **Objectives**

By the end of the session, participants will be able to:

- Personalize own risk for contracting HIV.
- 2. Describe methods of HIV prevention.

# Session Two Contents

- Prevention
- 2. Personal HIV Risk Assessment
- 3. HIV Testing
- 4. Video "Letter from Brian"

# Materials and Resources Needed

- Flip Chart, markers
- 2 HIV Risk Assessment
- Question/Comment Box

- 4. Pencils and note paper
- 5. Basketball game score board
- 6. VCR player

### SESSION THREE (two hours)

#### Objectives

By the end of the session, participants will be able to:

- Describe and utilize appropriate communication skills, including partner negotiation.
- Describe and utilize appropriate problem solving and decision making skills.
- Describe and role play condom negotiation skills sexual partner.

## Session Three Contents

- 1. Communication, Decision Making, and Partner Negotiation Skills
- 2. Video, "Are You with Me"

# Materials and Resources Needed

- 1. Flip chart, markers
- 2. VCR Player

### SESSION FOUR (two hours)

- 1. Describe how to use a condom correctly.
- Describe and utilize appropriate communication skills, including partner negotiation.

- Identify where/how to obtain condoms.
- Identify community resources, including drug treatment facilities, HIV
  antibody testing sites, self-help groups including Alcohol Anonymous
  (AA). Cocaine Anonymous (CA) and Narcotics Anonymous (NA).

#### Session Four Contents

- Correct Condom Use
- 2. Communication, Decision Making, and Partner Negotiation Skills
- Community Resources
- 4. Participants' comments regarding the educational program

### Materials and Resources Needed

- Hand out Correct condom use
- 2. Hand out Community Resources

### **VIDEOS**

Hoffman, J. (Producer), & Neema Barrett, N. (Director). (1991). <u>Are you with me?</u> (Film). AIDS Films (Select Media), New York.

Modern Talking Pictures SVS, Inc., (1988). <u>Don't forget Sherrie</u>. St. Petersburg, FL

# DECISION MAKING and PATNER NEGOTIATION ACTIVITY

You and your girl/boy friend are alone and the two of you are engaging in some heavy foreplay. What do you do next?

### HIV BASKETBALL GAME

Participants are divided into two teams, each with a team captain. The team captain is selects the question and provides an answer upon conferring with the other team members. Questions are selected from 1, 2, or 3 point categories. Questions worth 1 point have the least degree of difficulty and those worth 3 points are the most difficult. The team responding to a question will have 20 seconds to confer with each other and provide a response. Failure of a team captain to respond, respond within the designated time period, or respond with a correct answer will result in loss of turn and the other team will have the opportunity to respond to the question. The team that reaches 10 points first, wins the game.

### ONE POINT QUESTIONS

What is AIDS?

What is the name of the virus that causes AIDS?

What is HIV?

What is the name of the virus that causes AIDS?

## TWO POINT QUESTIONS

What are 2 ways an HIV positive mother can transmit HIV to her unborn or newborn child?

How can a person tell if they have HIV?

What are 4 ways HIV is not transmitted from one person to another?

What are 2 ways in which HIV is transmitted from one person to another?

### THREE POINT QUESTIONS

What are 4 body fluids through which HIV can be transmitted?

What are 4 ways in which HIV transmission can be prevented?

How can using non-injecting drugs, including alcohol place a person at risk for contracting HIV?

### FLIP CHART TOPICS

"HOW HIV IS TRANSMITTED"

Sexual Contact with person with HIV

Anal

Vaginal

Oral

Blood-to-Blood

Sharing same needle (injecting drug, tattoo) as person with HIV Sharing same items as person with HIV that can be contaminated

(i.e., razor, toothbrush)

HIV+ mother to unborn or newborn child

"HOW HIV IS NOT TRANSMITTED"

- 1 Casual Contact (i.e., shaking hands with HIV+ person)
- Insects/Animals
- 3. Inanimate objects
- Donating blood

#### "BODY FLUIDS THAT TRANSMIT HIV"

- 1 Blood
- Semen
- 3. Vaginal Secretions
- 4. Breast Milk

### "BODY FLUIDS THAT DO NOT TRANSMIT HIV"

- 1. Tears
- Sweat
- Saliva
- 4. Urine
- 5 Nasal Fluid

### "HIV HIGH RISK BEHAVIORS"

- 1. Sexual contact with HIV positive person
- 2. Sexual contact without a condom or other barrier method
- Sharing same items that can be contaminated with blood or sexual fluids as person with HIV (i.e., razors, needles, and sex toys)

#### "HIV PREVENTION"

- Sexual abstinence
- Drug abstinence
- 3. Latex condoms and other barrier methods (i.e. dental dam, saran wrap)
- 4. Clean injecting drug needles and other injecting equipment with bleach

- 5. No sharing of tattoo/body piercing needles and personal hygiene items
- Universal Precautions (avoid direct contact with fluids through which HIV
  can be transmitted

#### "HIV DISEASE SPECTRUM"

- Person becomes infected
- 2 weeks to 6 months to a positive antibody test
- 3. Average of 10 years to an AIDS Diagnosis
- 4. Average of 2-5 years from first opportunistic disease until death

### "HIV ANTIBODY TESTING"

- 1. Anonymous and confidential testing
- Benefits and risks of testing

### "DECISION MAKING STEPS" (Normative Theory of decision making)

- 1. List relevant action alternatives
- 2. Identify possible consequences of those actions
- 3. Evaluate the probability of each consequence occurring
- 4. Determine the relative significance of each consequence
- 5. Integrate information to identify most appealing course of action

# HIV/AIDS RISK ASSESSMENT (To be completed anonymously)

1.	YES	NO	Have you ever had sexual intercourse (anal, oral, or vaginal) with anyone without the use of a condom?
2.	YES	NO	Have you ever had sexual intercourse (anal, oral, or vaginal) with anyone with HIV or AIDS?
3.	YES	NO	Have you ever had sexual intercourse (anal, oral, or vaginal) with an IV drug user?
4.	YES	NO	Have you ever had sexual intercourse (anal, oral, or vaginal) with the sexual partner of anyone with HIV or AIDS?
5	YES	NO	Have you ever had sexual intercourse (anal, oral, or vaginal) with the sexual partner of an IV drug user?
6.	YES	NO	Have you ever shared drug injection equipment, including a needle with another person?
7.	YES	NO	Have you ever shared tattoo needles with another person?
8.	YES	NO	Have you ever shared body piercing needles with another person?
9.	YES	NO	If you answered yes to any of the above questions, have you been tested for HIV within 6 months of participation the last behavior(s) to which you answered yes?

#### COMMUNITY RESOURCES LIST

HIV Antibody Testing

(Anonymous)
Escambia AIDS Services and
Education (EASE)
3624 W. Fairfield Drive
Pensacola, Florida 32501
(850) 456-7079

# Condoms

EASE

Escambia County Public Health Dept.

Lakeview Center, Inc. Bldg. H

### Drug and Alcohol Counseling

Lakeview Center, Inc. 1221 W. Lakeview Avenue Pensacola, Florida 32501-1857 (850) 469-3730

### Support Groups

Alcoholics Anonymous (AA) (850) 433-4191

Narcotics Anonymous (NA) (850) 444-4298

Cocaine Anonymous (CA) (850) 444-0999

Mental Health Services

Lakeview Center, Inc. 1221 W. Lakeview Avenue Pensacola, Florida 32501-1857 (850) 469-3500

Baptist Hospital Behavioral Medicine Center (850) 434-4011

### Crisis Line (HelpLine)

(850) 595-1300

### Primary Health Care Services

Escambia Community Clinics 2200 Palafox Street Pensacola, Florida 32501 (850) 436-8880

Escambia County Public Health Department 1295 W. Fairfield Drive Pensacola, Florida 32501-1857 (850) 595-6500

#### REFERENCES

- Abraham, C., & Sheeran, P. (1994). Modelling and modifying young heterosexuals' HIV-preventive behavior; a review of theories, findings and educational implications. Patient Education and Counseling, 23,173-186.
- Airhihenbuwa, C. O., DiClemente, R. J., Wingood, G. M., & Lowe, A. (1992). HIV/AIDS education and prevention among African-Americans: A focus on culture. AIDS Education and Prevention, 4(3), 267-276.
- Allensworth, D. D., & Symons C. W. (1989). A theoretical approach to school-based HIV prevention. Journal of School Health. 59(2). 59-65.
- American Psychiatric Association. (1994). <u>Diagnostic and statistical manual of mental disorders</u> (4th ed.). Washington, DC: Author.
- Baker, C. J., & Morris, R. E. (1992). Coping with AIDS among juveniles. Corrections Today, 54(7), 146.
- Baker, S. A., Morrison, D. M., Carter, W. B., & Verdon, M. S. (1996). Using the Theory of Reasoned Action (TRA) to understand the decision to use condoms in a STD clinic population. <u>Health Education Quarterly</u>, 23(4), 528-542
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. <u>Psychological Review</u>, <u>84</u>(2), 191-215.
- Barthlow, D. J., DiClemente, R. J., & Lanier, M. M. (1995). Correlates of condom use among incarcerated adolescents in a rural state. <u>Criminal Justice and Behavior</u>, <u>22</u>(3), 295-306.
- Baxter, S. (1991). AIDS education in the jail setting. <u>Crime & Delinquency</u>, <u>37</u>(1), 48-63.
- Becker, M. H. (Ed.). (1974). <u>The health belief model and personal health behavior</u>. Therofare, New Jersey: Charles B. Slack.
- Bell, T. A., Farrow, J. A., Stamm, W. E., Critchlow, C. W., & Holmes, K. K. (1985). Sexually transmitted diseases in females in a juvenile detention center. Sexually Transmitted Diseases, 12(3), 140-144.

- Beyth-Marom, R., Fischhoff, B., & Quadrel, M. J. (1991). Teaching decision making to adolescents: A critical review. In J. Baron & R. V. Brown (Eds.), <u>Teaching decision making to adolescents</u> (pp.19-59). Hillsdale, N J: Frihaum
- Black, H. C. (Ed.). (1993). <u>Black's law dictionary</u> (6<sup>th</sup> ed.). St. Paul, MN: West.
- Bloom, D. E., & Carliner, G. (1988). The economic impact of AIDS in the United States. <u>Science</u>, <u>239</u>(4840), 604-610.
- Bower, S. A, & Bower, G. (1976). <u>Asserting yourself: A practical guide for positive change.</u> Reading, MA: Addison-Wesley.
- Bowler, S., Sheon, A. R., D'Angelo, L. J., & Vermund, S. H. (1992). HIV and AIDS among adolescents in the United States: Increasing risk in the 1990s. <u>Journal of Adolescence</u>, <u>15</u>(4), 345-371.
- Boyer, C. B., & Kegeles, S. M. (1991). AIDS risk prevention among adolescents. <u>Social Science Medicine</u>, <u>33</u>(1), 11-23.
- Boyer, B. B. Shafer, M., & Tschann. (1997). Evaluation of a knowledgeand cognitive-behavioral skills-building intervention to prevent STDs and HIV infection in high school students. <u>Adolescence</u>, <u>32</u>(125), 25-42.
- Brown, L. K., Barone, V. J., Fritz, G. K., Cebollero, P., 7 Nassau, J. H. (1991). AIDS education: The Rhode Island experience. <u>Health Education</u> Quarterly, 18(2), 195-206.
- Brown, L. K., DiClemente, R. J., & Reynolds, L. A. (1991). HIV prevention for adolescents: Utility of the health belief model. <u>AIDS Education and Prevention</u>, 3(1), 50-59.
- Brown, L. K., Fritz, G. K., & Barone, V. J. (1989). The impact of AIDS education on junior and senior high school students. <u>Journal of Adolescent Health Care</u>, 10(5), 386-392.
- Burke, D. S., Brundage, J. F., Goldenbaum, M., Garner, L. J., Peterson, M., Visintine, R., Redfield, R. R., & the Walter Reed Retrovirus Research Group. (1990). Human immunodeficiency virus infections in teenagers: Seroprevalence among applicants for U.S. military service. <u>JAMA</u>, <u>263</u>(15), 2074-2077.
- Catania, J. A., Kegeles, S. M., & Coates, T. J. (1990). Towards an understanding of risk behavior: An AIDS Risk Reduction Model (ARRM). <u>Health Education Quarterly</u>, <u>17(1)</u>, 53-72.

Centers for Disease Control and Prevention. (1996). <u>HIV/AIDS</u> surveillance report (DHHS Volume 8, No. 2), Atlanta, GA.

Centers for Disease Control and Prevention. (1994). Update: Trends in AIDS diagnosis and reporting under the expanded surveillance definition for adolescents and adults - United States, 1993. MMWR, 43(45), 826-831.

Centers for Disease Control and Prevention. (1993). <u>HIV/AIDS</u> prevention. (September). Atlanta. GA.

Centers for Disease Control and Prevention. (1993). 1993 Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. JAMA. 269(6). 729-730.

Centers for Disease Control and Prevention. (1992). Selected behaviors that increase risk for HIV infection, other sexually transmitted diseases, and unintended pregnancy among high school students - United States, 1991.

MMWR, 41(50), 945-950

Centers for Disease Control and Prevention. (1992). HIV prevention in the U.S. correctional system, 1991, MMWR, 41(22), 389-91, 397.

Centers for Disease Control and Prevention. (1989). Results from the National Adolescent Student Health Survey. JAMA, 261(14), 2025, 2031.

Council on Scientific Affairs. (1990). Health status of detained and incarcerated youths. <u>JAMA</u>, <u>263</u>(7), 987-991.

Damond, M. E., Breuer, N. L., & Pharr, A. E. (1993). The evaluation of setting and a culturally specific HIV/AIDS curriculum: HIV/AIDS knowledge and behavioral intent of African American adolescents. <u>Journal of Black Psychology</u>, 19(2), 169-189.

DiClemente, R. J. (1993a). Preventing HIV/AIDS among adolescents: Schools as agents of behavior change. <u>JAMA</u>, <u>270</u>(6), 760-762.

DiClemente, R. J. (1993b). Confronting the challenge of AIDS among adolescents: Directions for future research. <u>Journal of Adolescent Research</u>, 8(2), 156-166.

DiClemente, R. J., Boyer, C. B., & Morales, E. S. (1988). Minorities and AIDS: Knowledge, attitudes, and misconceptions among Black and Latino adolescents. <u>American Journal of Public Health</u>, 78(1), 55-57.

- DiClemente, R. J., Brown, L. K., Beausoleil, N. I., & Lodico, M. (1993). Comparison of AIDS knowledge and HIV-related sexual risk behaviors among adolescents in low and high AIDS prevalence communities. <u>Journal of Adolescent Health</u>, 14(3), 231-236.
- DiClemente, R. J., Lanier, M. M., Horan, P. F., & Lodico, M. (1991). Comparison of AIDS knowledge, attitudes, and behaviors among incarcerated adolescents and a public school sample in San Francisco. <a href="Memorian Journal of Public Health"><u>American Journal of Public Health</u>, 81(5), 628-630.</a>
- DiClemente, R. J., Zorn, J., & Temoshok, L. (1986). Adolescents and AIDS: A survey of knowledge, attitudes and beliefs about AIDS in San Francisco. American Journal of Public Health, 76(12), 1443-1445.
- Dixon, P. M. (1994). HIV education model for adolescents and preadolescents. <u>Public Health Reports</u>, 109(2), 180-181.
- Dolan, K., Wodak, A., & Penny, R. (1995). AIDS behind bars: Preventing HIV spread among incarcerated drug injectors. <u>AIDS</u>, 9(8), 825-832.
- DuRant, R. H., Ashworth, C. S., Newman, C., & Gaillard, G. (1992). High school students' knowledge of HIV/AIDS and perceived risk of currently having AIDS. <u>Journal of School Health</u>, 62(2), 59-63.
- Farnham, P. G., & Gorsky, R. D. (1994). Costs to {business for an HIV-infected worker. <u>Inquiry</u>, <u>31</u>(1), 76-88.
- Fisher, J. D., & Fisher, W. A. (1992). Changing AIDS-risk behavior. Psychological Bulletin, 111(3), 455-474.
- Fullilove, M. T., Golden, E., Fullilove, III, R. E., Lennon, R., Porterfield, D, Schwarcz, S., & Bolan, G. (1993). Crack cocaine use and high-risk behaviors among sexually active Black adolescents. <u>Journal of Adolescent Health.</u> 14(4), 295-300.
- Gellert, G. A., Maxwell, R. M., Higgins, K. V., Pendergast, T., & Wilker, N. (1993). HIV infection in the women's jail, Orange County, California, 1985 through 1991. <u>American Journal of Public Health</u>, <u>83</u>(10), 1454-1456.
- Gillmore, M. R., Morrison, D. M., Lowery, C., & Baker, S. A. (1994). Beliefs about condoms and their association with intentions to use condoms among youth in detention. <u>Journal of Adolescent Health</u>, <u>15</u>(3), 228-237.

- Gillmore, M. R., Morrison, D. M., Richey, C. A., Balassone, M. L., Gutierrez, L., & Farris, M. (1997). Effects of a skill-based intervention to encourage condom use among high risk heterosexually active adolescents. AIDS education and prevention, 9(supplement A), 22-43.
- Hammett, T. M., & Moini, S. (1990a). <u>Update on AIDS in prisons and jails</u>. Department of Justice.
- Hammett, T. M., & Moini, S. (1990b). AIDS: Corrections' continuing challenge. <u>Corrections Today</u>, <u>52</u>(5), 210-214.
- Harper, G. W. (1992). <u>Incarcerated Adolescents' engagement in AIDS/HIV high-risk behaviors: Ethnic-racial and gender differences</u>. Poster presented at the annual convention of the American Psychological Association, Washington, DC.
- Hein, K. (1993). "Getting real" about HIV in adolescents. American Journal of Public Health, 83(4), 492.
- Hein, K. (1992). Adolescents at risk for HIV infection. In R. J. DiClemente (ed), <u>Adolescents and AIDS</u>: <u>A generation in jeopardy</u> (pp. 3-16). Newbury Park, CA: Sage.
- Hingson, R. W., Strunin, L, Berlin, B. M., & Heeren, T. (1990). Beliefs about AIDS, use of alcohol and drugs, and unprotected sex among Massachusetts adolescents. American Journal of Public Health, 80(3), 295-299.
- Huber, J. T. (1993). <u>Dictionary of AIDS related terminology</u>. New York: Neal-Schuman Publishers.
- Huszti, H. C., Clopton, J. R., & Mason, P. J. (1989). Acquired Immunodeficiency Deficiency Syndrome educational program: Effects on adolescents' knowledge and attitudes. <u>Pediatrics</u>, <u>64</u>(6), 986-994.
- Janz, N. K, & Becker, M. H. (1984). The Health Belief Model: A decade later. Health Education Quarterly, 11(1), 1-47.
- Jemmott, J. B., III, Jemmott, L. S., & Fong, G. T. (1998). Abstinence and safer sex HIV risk-reduction interventions for African American Adolescents. JAMA, 279(19), 1529-1536.

- Jemmott, J. B., III, Jemmott, L. S., & Fong, G. T. (1992). Reductions in HIV risk-associated sexual behaviors among black male adolescents: Effects of an AIDS prevention education. <u>American Journal of Public Health</u>, 82(3), 372-377
- Job, R. F. S. (1988). Effective and ineffective use of fear in health promotion campaigns. American Journal of Public Health, 78(2), 163-167.
- Jonsen, A. R., & Stryker, J. (Eds.). (1993). The social impact of AIDS in the United States. Washington, DC: National Academy Press.
- Kann, L., Warren, C. W., Harris, W. A., Collins, J. L., Douglas, K. A., Collins, M. E., Williams, B. I., Ross, J. G., & Kolbe, I. J. (1995). Youth risk behavior surveillance United States, 1993. <u>Journal of School Health</u>, 65(5), 163-171.
- Katz, R. C., Mills, K., Singh, N. N., & Best, A. M. (1995). Knowledge and attitudes about AIDS: A comparison of public high school students, incarcerated delinquents, and emotionally disturbed adolescents. <u>Journal of Youth and Adolescence</u>, 24(1), 117-121.
- Kipke, M., Boyer, C., & Hein, K. (1993). An evaluation of an AIDS risk reduction education and skills training (Arrest) program. <u>Journal of Adolescent</u> Health, 14(7), 533-539.
- Kirby, D., Korpi, M., Adivi, C., & Weissman J. (1997). An impact evaluation of project SNAPP: and AIDS and pregnancy prevention middle school program. AIDS Education and Prevention, 9 (Suppl. A), 44-61.
- Kline, A., & VanLandingham, M. (1994). HIV-infected women and sexual risk reduction: the relevance of existing models of behavior change. <u>AIDS</u> Education and Prevention. 6(5), 390-402.
- Kolbe, L. J. (1992). The role of the Federal Government I promoting health through the schools: Report from the division of Adolescent and School Health, Centers for Disease Control. <u>Journal of School Health</u>, 62(4), 135-137.
- Kooperman, C., Rosario, M., & Rotheram-Borus, M. J. (1994). Alcohol and drug use and sexual behaviors placing runaways at risk for HIV infection. <u>Addictive Behaviors</u>, 19(1), 95-103.
- Kowalewski, M. R., Longshore, D., & Anglin, M. D. (1994). The AIDS Risk Reduction Model: Examining intentions to use condoms among injection drug users. <u>Journal of Applied Social Psychology</u>, 24(22), 2002-2027.

- Lanier, M. M. (1996). An empirical assessment of the AIDS risk reduction model (ARRM) employing ordered probit analysis. <u>Journal of Criminal Justice</u>, 24(6), 537-547.
- Lanier, M. M., DiClemente, R. J., & Horan, P. F. (1991). HIV knowledge and behaviors of incarcerated youth: A comparison of high and low risk locales. Journal of Criminal Justice, 19(3), 257-262.
- Lanier, M., & McCarthy, B. R. (1989a). Knowledge and concern about AIDS among incarcerated juvenile offenders. <u>The Prison Journal</u>, <u>69</u>(1), 39-59.
- Lanier, M. M., & McCarthy, B. R. (1989b). AIDS awareness and the impact of AIDS education in juvenile corrections. <u>Criminal Justice and Behavior</u>, <u>16</u>(4), 395-411.
- Longshore, D. (1990). AIDS education for three high-risk populations. <u>Evaluation and Program Planning</u>, <u>13</u>(1),67-72.
- McBride, D. C., & Inciardi, J. A. (1990). AIDS in the IV drug user in the criminal justice system. <u>Journal of Drug Issues</u>, 20(2), 267-280. \*capitalize IV?
- Main, D. S., Iverson, D. C., McGloin, J., Banspach, S. W., Collins, J. L., Rugg, D. L., & Kolbe, L. J. (1994). Preventing HIV infection among adolescents: Evaluation of a school-based education program. <u>Preventive Medicine</u>, 23(4), 409-417.
- Malow, R. M., Corrigan, S. A., Cunningham, S. C., West, J. A., & Pena, J. M. (1993). Psychosocial factors associated wit condom use among African-American drug abusers in treatment. <u>AIDS Education and Prevention</u>, <u>5</u>(3), 244-253.
- Melchert, T., & Burnett, K. F. (1990). Attitudes, knowledge, and sexual behavior of high-risk adolescents: Implications for counseling and sexuality education. <u>Journal of Counseling & Development</u>, 68(3), 293-298.
- Montgomery, S. B., Joseph, J. G., Becker, M. H., Ostrow, D. G., Kessler, R. C., & Kirscht, J. P. (1989). The health belief model in understanding compliance with preventive recommendations for AIDS: How useful? <u>AIDS Education and Prevention</u>, 1(4), 303-323.
- Morris, R. E., Baker, C. J., & Huscroft, S. (1992). Incarcerated youth at risk for HIV infection. In R. J. DiClemente (Ed.), <u>Adolescents and AIDS: A generation in Jeopardy</u> (pp. 52-70). Newbury Park, CA: Sage Publications.

Morrison, D. M., Baker, S. A., & Gillmore, M. R. (1994). Sexual risk behavior, knowledge, and condom use among adolescents in juvenile detention. Journal of Youth and Adolescence, 23(2), 271-288.

Morton, M., Nelson, L., Walsh, C., Zimmerman, S., & Coe, R. M. (1996). Evaluation of a HIV/AIDS education program for adolescents. <u>Journal of Community Health</u>, 21(1), 23-35.

Nader, P. R., Wexler, D. B., Patterson, T. L., McKusick, L., & Coates, T. (1989). Comparison of beliefs about AIDS among urban, suburban, incarcerated, and gay adolescents. Journal of Adolescent Health Care, 10(5), 413-418.

National Commission on AIDS. (1994). Preventing HIV/AIDS in adolescents. <u>Journal of School Health</u>, 64(1), 39-51.

National Institute on Drug Abuse (NIDA). (1991). Community-Based AIDS Prevention. Rockville, Md.: National Institute on Drug Abuse.

Nelkin, D., Willis, D. P., & Parris, S. V. (1990). Introduction: A disease of society: Cultural responses to AIDS. <u>The Milbank Quarterly</u>, <u>68</u>(suppl. 1), 1-9.

<u>The new encyclopedia Britannica</u> (15<sup>th</sup> ed., vol. 1). (1997) Chicago: Encyclopedia Britannica.

Newman, C., DuRant, R. H., Ashworth, C. S., & Gaillard, G. (1993). An evaluation of a school-based AIDS/HIV education program for young adolescents. AIDS Education and Prevention, 5(4), 327-339.

Oh, M. K., Cloud, G. A., Wallace, L. S., Reynolds, J., Sturdevant, M., & Feinstein, R. A. (1994). Sexual behavior and sexually transmitted diseases among male adolescents in detention. <u>Sexually Transmitted Diseases</u>, 21(3), 127-132

Pagliaro, A. M., & Pagliaro, L. A. (1992). Sentenced to death? HIV infection and AIDS in prisons – current and future concerns. <u>Canadian Journal of Criminology</u>, 34(2), 201-214.

Pan American Health Organization/World Health Organization (1997). AIDS Surveillance in the Americas Quarterly Report, 10 June 1997, PAHO/HCA/97.006.

Pan American Health Organization/World Health Organization (1997). Quarterly Report, 10 June 1997. Geneva, Switzerland.

- Petosa, R., & Wessinger, J. (1989). Using the health belief model to assess the HIV education needs of junior and senior high school students. International Quarterly of Community Health Education, 10(2), 135-143.
- Pittman, K. J., Wilson, P. M., Adams-Taylor, S. & Randolph, S. (1992). Making sexuality education and prevention programs relevant for African-American Youth. Journal of School Health. 62(7). 339-344.
- Polonsky, S., Kerr, S., Harris, B., Gaiter, J., Fichtner, R. R., & Kennedy, M. G. (1994). HIV prevention in prisons and jails: Obstacles and opportunities. Public Health Reports, 109(5), 615-625.
- Price, J. H., Desmond, S. & Kukulka, G. (1985). High school students' perceptions and misperceptions of AIDS. <u>Journal of School Health</u>, <u>55</u>(3), 107-109.
- Reinecke, J., Schmidt, P., & Ajzen, I. (1996). Application of the theory of planned behavior to adolescents' condom use: A panel study. <u>Journal of Applied Social Psychology</u>, <u>26</u>(9), 749-772.
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). social learning theory and the health belief model. Health Education Quarterly, 15(2), 175-183.
- Rotheram-Borus, M. J., & Kooperman C. (1991). HIV and adolescents. Journal of Primary Prevention, 12(1), 65-82.
- Rotheram-Borus, M. J., Kooperman, C., Ehrhardt, A. A. (1991). Homeless youths and HIV infection. <u>American Psychologist</u>, 46(11), 1188-1197.
- Rotheram-Borus, M. J., Kooperman, C., Haignere, C., & Davies, M. (1991). Reducing HIV sexual risk behaviors among runaway adolescents. <u>JAMA</u>, 266(9), 237-241.
- Rotheram-Borus, M. J., Mahler, K. A., & Rosario, M. (1995). AIDS prevention with adolescents. <u>AIDS Education and Prevention</u>, <u>7</u>(3), 320-336.
- Ruder, A. M., Flam, R., Flatto, D., & Curran, A. S. (1990). AIDS education: Evaluation of school and worksite based presentations. New York State Journal of Medicine, 90, 129-133.
- St. Lawrence, J. S., Brasfield, T. L., Jefferson, K. W., Alleyne, E., O'Bannon, III, R. E. & Shirley, A. (1995). Cognitive-behavioral intervention to reduce African-American adolescents' risk for HIV infection. <u>Journal of Consulting and Clinical Psychology</u>, 63(2), 221-237.

St. Lawrence, J. S., Jefferson, K. W., Alleyne, E., & Brasfield. (1995). Comparison of education versus behavioral skills training interventions in lowering sexual HIV-risk behavior of substance-dependent adolescents. <u>Journal of Consultino and Clinical Psychology</u>, 63(1), 154-157.

St. Lawrence, J. S., Jefferson, K. W., Banks, P. G., Cline, T. R., Alleyne, E., & Brasfield, T. L. (1994). Cognitive-behavioral group intervention to assist substance-dependent adolescents in lowering HIV infection risk. AIDS Education

and Prevention, 6(5), 425-435.

- St. Louis, M. E., Conway, G. A., Hayman, C. R., Miller, C., Petersen, L. R., & Dondero, T. J. (1991). Human immunodeficiency virus infection in disadvantaged adolescents: Findings from the US Job Corps. <u>JAMA</u>, <u>266</u>(17), 2387-2391.
- Schinke, S. P., Botvin, G.J., Orlandi, M. A., Schilling, R. F., & Gordon, A. N. (1990). African-American and Hispanic-American adolescents, HIV infection, and preventive intervention. <u>AIDS Education and Prevention</u>, <u>2</u>(4), 305-312.
- Siegel, L. J. (1993). Editorial: Children's understanding of AIDS: Implication for preventive interventions. <u>Journal of Pediatric Psychology</u>, <u>18</u>(2), 173-176.
- Steers, W. N., Elliott, E., Nemiro, J., Ditman, D., & Oskamp, S. (1996). Health beliefs as predictors of HIV-preventive behavior and ethnic differences in prediction. <u>The Journal of Social Psychology</u>, <u>136</u>(1), 99-110.
- Stein, G. (1993). <u>Acquired immune deficiency syndrome: Biological, medical, social and legal issues</u>. Englewood Cliffs, New Jersey: Prentice Hall.
- Steitz, J. A., & Munn, J. A. (1993). Adolescents and AIDS: Knowledge and attitude. Adolescence, 28(111), 609-619.
- Stevens, S. J. (1993). HIV prevention programs in a jail setting: Educational Strategies. The Prison Journal, 73(3&4), 379-390.
- Stevenson, H. C., & Davis, G. (1994). Impact of culturally sensitive AIDS video education on the AIDS risk knowledge of African-American Adolescents. AIDS Education and Prevention, 6(1), 40-52.
- Stevenson, H. C., Gay, K. M., & Josar, L. (1995). Culturally sensitive AIDS education and perceived AIDS risk knowledge: Reaching the "know-it-all" teenager. AIDS Education and Prevention, 7(2), 134-144.

Stricoff, R. L., Kennedy, J. T., Nattell, T. C., Weisfuse, I. B., & Novick, L. F. (1991). HIV seroprevalence in a facility for runaway and homeless adolescents. American Journal of Public Health, 81(suppl.), 50-53.

Strunin, L. (1991). Adolescents' perceptions of risk for HIV infection: Implications for future research. Social Science Medicine, 32(2), 221-228. Walter, H. J., & Vaughan, R. D. (1993). AIDS risk reduction among a multiethnic sample of urban high school students. JAMA, 270(6), 725-730.

Williams, M. L. (1993). HIV infection among a national sample of adolescent intravenous drug abuser. <u>Alcoholism Treatment Quarterly</u>, <u>10</u>(1/2), 107-120.

The world book encyclopedia. (1995) Chicago: World Book Inc.

World Health Organization. (1995). Office of Information (Press release No.11). Geneva, Switzerland.

Yarber, W. L., & Parrillo. (1992). Adolescents and sexually transmitted diseases. Journal of School Health. 62(7), 331-338.

#### BIOGRAPHICAL SKETCH

I received a Bachelor of Science degree in Physical Education with a minor in Health Education from Tuskegee University and a Master of Science degree in Health Education from the University of West Florida. My professional experience includes serving as clinical intake specialist/utilization manager and health education specialist for a drug and alcohol treatment program; director of a Florida Department of Juvenile Justice detention facility; therapist/case manager for a community mental heath agency; and as a drug and alcohol counselor for an adolescent residential substance abuse treatment program. I also taught at the junior high school, high school, and adult high school levels. I will be granted a Doctor of Philosophy in health and human performance with an emphasis in health behavior and a minor in medical sociology through the College of Health and Human Performance, Department of Health Science Education in August 1998. I will begin as visiting assistant professor at the University of Florida in the Department of Health Science Education in August 1998.

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